

PSYCHOLOGICAL ABSTRACTS

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GENERAL

4869. Adler, A. Die Formen der seelischen Aktivität. (Forms of mental activity.) *Ned. Tijdschr. Psychol.*, 1933, 1, 229-235.—(Not seen.)—H. Beaumont (Kentucky).

4870. Alvim, J. F. [Ed.] *Revista de neurologia e psiquiatria de São Paulo*. Sao Paulo: Imprensa Methodistista. Vol. 1, No. 1, October, 1934. Quarterly. \$3.00.—R. R. Willoughby (Clark).

4871. Anderson, J. E. The third Minneapolis meeting of the American Association for the Advancement of Science. Scientific sessions: section on psychology. *Science*, 1935, 82, 82.—E. H. Kemp (Clark).

4872. [Anon.] Eine neue Zeitschrift für gerichtliche Schriftuntersuchung. (A new journal for forensic graphology.) *Arch. Kriminol.*, 1935, 96, 252.—*Die Schrift*, edited by O. Fanta and W. Schönfeld and published by R. M. Rohrer in Brunn, was established early in 1935. (Bimonthly; annual subscription RM. 8.) It is a professional journal devoted to scientific and forensic graphology, the study and history of scripts, the teaching of penmanship, and the knowledge of autographs. Among the articles in the second number are "Psychological analyses in the comparison of scripts in legal cases," by Kanger, "Changes in handwriting with the approach of death," by H. Jacobi, and "Graphological considerations in the Hauptmann trial," by T. Stein.—M. E. Morse (Baltimore).

4873. Barrett, J. F. *Elements of psychology for nurses*. (Rev. ed.) Milwaukee: Bruce, 1935. Pp. xxi + 400. \$2.50.—A textbook written by a Catholic priest from the point of view of scholastic philosophy. The table of contents includes such topics as mental faculties, impulses and desires, the nature of the soul, the immortality of the soul, the subconscious, and psychotherapy. References for reading, a glossary and an index are appended.—S. Rosensweig (Worcester State Hospital).

4874. Baylis, C. A. The nature of evidential weight. *J. Phil.*, 1935, 32, 281-286.—Keynes, admitting that the problem is confused, asserts that the "weight" of an argument is independent of its probability and depends on the amount of evidence. Increase in weight does not necessarily diminish probable error. The relationship between weight and probability, however, is closer than Keynes realizes. In statistical analyses an increase in the number of cases diminishes the chances of atypical sampling, thus increasing the reliability, for the larger the sample the higher the probability of its being typical. In non-numerical evidence, similarly, the more extensive the data the more reliable the conclusion. In any case the more comprehensive knowledge is less likely to omit im-

portant determining factors. Reliability is the reciprocal of probable error. Hence weight, probability, and probable error are closely related.—E. T. Mitchell (Texas).

4875. Beritoff, I. [On the psycho-nervous foundations of individual behavior.] *Trud. biol. Sekt., Akad. Nauk SSSR, zakavkaz. Filial*, 1934, 1, 82-85.—The author presents the following conclusions regarding the individual behavior of mammals, on the basis of numerous observations of the behavior of the dog: (1) Behavior is called individual if it arises from individual experiences and if it is always evoked by means of the imagination of the final goal of the behavior. (2) The imagination of the external situation with all its components (obstacles, roundabout ways, location of food, etc.) arises immediately at first approval of the situation and involves the excitation not only of external receptors and of proprioceptors but also an emotional condition of satisfied needs. (3) "Imagination" is defined as the integral psycho-nervous process that arises in a given nervous formation together with all its material nervous processes and corresponding subjective experiences. (4) All the psycho-nervous content of imagination comes into play at the very beginning of the corresponding behavior. (5) The most characteristic peculiarities of the psychogenic elements are their ease of excitation, extremely great intensity, and rapidity of propagation.—R. Smith (Clark).

4876. Beritoff, I., & Dzidzishvili, N. N. [On the relation between innate, individually acquired, and conscious activity of human beings.] *Trud. biol. Sekt., Akad. Nauk SSSR, zakavkaz. Filial*, 1934, 1, 157-161.—R. Smith (Clark).

4877. Brunschvicg, L. Science et prise de conscience. (Science and attitude of conscience.) *Scientia, Bologna*, 1934, 55, 329-340.—This is a review of the various attitudes toward the absoluteness of scientific laws, in which the author shows how older scientific principles in all spheres have been readjusted by the application of relativistic rather than absolute ideas. He points out that this honesty of point of view, to be obtained by leaving out certain scholastic ideas, has its basis in language, beginning even with the Latin. Its philosophical basis lies with Kant and at present the Einstein and Poincaré points of view are important. He concludes with a plea for a science which is not fixed but is guided by an enlightened conscience aiming to have the truth.—L. Selling (Wayne).

4878. Cory, D. The kinds of perception and knowledge. *J. Phil.*, 1935, 32, 309-323.—At the level of common sense, sense-data are identified with external reality. This is biologically expedient, but illusory, so we call it "true hallucination." It gives

us "virtual knowledge of existence" which, because of its utilitarian and pragmatic validity, must be symbolic or representative of reality. Artificial perception, using instruments and other refinements, is merely an extension of common-sense perception. Belief in the reality of this perceptual world must be suspended temporarily, but completely to discard it is to commit the "fallacy of sophisticated perception." Mentalistic theories which neglect the instinctive feeling for external reality and the motor side of perception are cases of sedentarism. But the mathematical equations and logical structures which the sophisticated attitude discovers give some clue to the impersonal nature of the world, and at the same time correct the credulity of a naïve realism. A critical realism, while not a complete explanation, offers a satisfactory approach to the problem.—*E. T. Mitchell* (Texas).

4879. **Driesch, H. Leib und Seele.** (Mind and body.) *Forsch. Fortsch. dtsch. Wiss.*, 1935, 11, No. 8, 99-100.—Driesch attacks the viewpoint that considers the problem of mind and body solved by looking on man as a mind-body unit. He points out the dualism in the nature of man and discusses the theories of psychophysical interaction and psychophysical parallelism. He can give stringent proof that the theory of parallelism as the relation between mind and body is false—"its opposite, because there is no third alternative, is therefore true." His first proof is that man's behavior is on the basis of a historically conditioned reaction, "nothing resembling which exists in inorganic nature." Similarly the actual carrying out of an act shows that the individual in question is no mechanical automaton, which he would have to be according to the theory of a psychomechanistic parallelism. Second, a basic difference in form can be shown between the mental and the mechanical. In the latter, events are ranged side by side, in the former they are centered round an ego; the material world is built up out of a few atoms, while in the realm of experience are many groups of unanalyzable special forms. Third, when we reject the mind as an independent entity, it becomes impossible to explain remembering on the basis of a parallelistic "trace-theory." Only when we reject parallelism do the problems of freedom and immortality become meaningful again. We must go further than Descartes and under "mind" include the unconscious.—*J. Deussen* (Markkleeberg).

4880. **Fuller, B. The tyranny of the mind: a common sense psychology.** London: Laurie, 1935. Pp. 253. 8/6.—Discusses in very general terms how some of the higher mental processes have evolved, the difficulties to which they may lead, and how, in the author's opinion, those difficulties may be overcome.—*F. C. Bartlett* (Cambridge, England).

4881. **Gemelli, A. Ricerche condotte in Italia nell' anno XII nel campo della psicologia.** (Research conducted in Italy during the last twelve years in the field of psychology.) *Riv. Psicol. norm. patol.*, 1934, 30, 259-261.—*T. M. Abel* (General Education Board).

4882. **Gibson, K. S. A filter for obtaining light at wave length 560 mμ.** *Bur. Stand. J. Res., Wash.*,

1935, 14, 545-552.—Describes and gives the optical properties of a new glass filter which gives a monochromatic light at 560 mμ.—*C. M. Louttit* (Indiana).

4883. **Griffiths, J. H. The psychology of human behavior.** New York: Farrar & Rinehart, 1935. Pp. 515. \$2.50.—The present elementary text devotes 48 pages to the nature of psychology, 180 pages to learning and intelligence, 66 pages to feeling and emotion, 45 pages to thinking and imagining, 89 pages to perception and attending, and 29 pages to personality.—*W. S. Hunter* (Clark).

4884. **Groddeck, G. The world of man; as reflected in art, in words and in disease.** (Trans. by M. Collins.) London: Daniel, 1934. Pp. 271. 10 s. 6 d.—The author presents the view that everything is a paradox or an unknowable phenomenon, that nothing is familiar and that the only common ground is the incomprehensible, the inconsequential, or the infallibility of the id. He refutes the mental aspects and exalts the body, making the id physical rather than mental. He feels that the orientation of the id is to the ego only, with the ego's only object the id. He defines the id as the intimate part of the personality, uninfluenced by the environment but responsive to injuries apart from the injuring force. Introjection and projection are excluded from his theory. He discusses etymology at great length under an outline covering "The Whole as Part," "The Part as Whole," "The Mind-Body," "Sex and the Individual," "Man's Part as Female . . . As Male . . . As Child," "Love, Death and Transfiguration," and "The Salvation of the World." He makes the comment, "Suffer no one to comfort thee . . . The helper must ever be inept."—*M. H. Erickson* (Eloise Hospital).

4885. **Hartenstein, E. Persönliche Stimmung und Ausseneinfluss auf die Erlebniswelt.** (Subjective mood and environmental influence on the world of experience.) *Ned. Tijdschr. Psychol.*, 1933, 1, 163-192.—(Not seen.)—*H. Beaumont* (Kentucky).

4886. **Hughes, P. Discussion: Is solipsism intelligible?** *J. Phil.*, 1935, 32, 328-329.—The assumptions of solipsism as formulated by Greene and Stace in this journal imply a triad of interacting entities, viz., the ego, the given, and the source or giver. They therefore imply the very world that the solipsist proposes to deny. Stace's formulation of the problem involves the error of supposing that what we experience is our own experiencing (e.g. that what we see is our seeing), and the further error of supposing that the mind is a region wherein experiencing occurs instead of a way of experiencing. He confuses reflective experience with direct perceptual experience.—*E. T. Mitchell* (Texas).

4887. **Jastrow, J. Managing your mind.** New York: Greenberg, 1935. Pp. 268. \$1.00.—*R. R. Willoughby* (Clark).

4888. **Katz, D. Georg Elias Müller.** *Acta psychol., Hague*, 1935, 1, 234-240.—*R. R. Willoughby* (Clark).

4889. **Los, S. O. Calvinistische psychologie in Zuid Afrika.** (Calvinistic psychology in South

Africa.) *Ned. Tijdschr. Psychol.*, 1933, 1, 455-470.—(Not seen.)—H. Beaumont (Kentucky).

4890. Marzi, A. L'ottavo congresso internazionale di psicotechnica a Praga. (The eighth international congress of psychotechnics at Prague.) *Riv. Psicol. norm. patol.*, 1934, 30, 254-258.—T. M. Abel (General Education Board).

4891. McIntosh, G. F. The relation of psychology to philosophy. *Aust. J. Psychol. Phil.*, 1935, 13, 93-110.—The current claim of psychologists that psychology is or can be independent of philosophy is denied. The problems of mind and body, sensory atomism, and part and whole, among others, involve speculative assumptions which the psychologist does not always recognize. This is true, moreover, of the terminology itself, regardless of theory. Taking epistemology as a sample problem, it is shown that empiricistic conclusions about mind, which developed the theory of "representative perception" from British idealism, are at variance with the actual assumptions. This was pointed out in its essentials by Berkeley, who showed that the theory of ideas added nothing to the situation. The conclusions of behaviorism and act psychology are also at variance with the assumptions. Psychology should acknowledge that, being concerned with *relations*, both terms must be studied. "Mind" is one of the terms. The appropriate philosophy is realism (not American realism, which often supports behaviorism), which regards mind as consisting of feeling-relations.—H. D. Spoerl (Northeastern).

4892. Minkowski, E. Essai sur l'intériorité et sur les dimensions vécues. (Introspection and the conscious dimensions.) *J. Psychol. norm. path.*, 1935, 32, 26-48.—Introspection and extrospection are both accepted as real. It is convenient to analyze the continual flux characteristic of the mental life into perceptions, feelings and volitions, but these categories seem to be merely a reflection of a more fundamental tripartite division of mental reality. Each of the three dimensions, height, breadth and depth, has a qualitative value unique and distinct from, yet dependent upon the others. Geometrical space cannot be validly regarded as a primitive form of spatiality, although without being conscious of the logical error involved we apply these dimensions as qualitative descriptions of mental life, such as narrowness of ideas, depth of feeling, width of knowledge.—P. S. de Q. Cabot (Harvard).

4893. Nicolai, L. Methoden der Muskel- und Nervenphysiologie. Die Methode der Licht-Stromformung. (Methods of muscle and nerve physiology. The method of light-beam formation.) *Handb. biol. ArbMeth.*, 1934, No. 424. Pp. 89.—Discusses the operation of photo-electric cells, both of the vacuum and of the selenium type, and describes vacuum tube amplifying equipment to actuate registering devices.—R. R. Willoughby (Clark).

4894. Oliver, J. R. The ordinary difficulties of everyday people. New York: Knopf, 1935. Pp. xii + 296. \$2.75.—This is a popular exposition of the author's views about the normal individual and his

customary life problems. "I want to set down what little I have learned about ordinary human beings from the time they are born up to the day of their deaths."—S. Rosensweig (Worcester State Hospital).

4895. Pauli, R. Psychologie der Neuzeit. (Psychology of a modern day.) *Arch. ges. Psychol.*, 1935, 93, 520-570.—This article was presented in 1934 before the department of philosophy at the University of Munich, and deals with the part the university has played in the development of psychology as a science since its beginnings in Wundt in 1879. It carries the development through to Stumpf and his period, during which discussion centered on the body-mind concept, a psycho-physical phase. During this time an empirical-experimental psychology arose. The period of Lipps followed, with emphasis on consciousness as a phenomenon, a form of Gestalt psychology. The third phase arose with Külpe and dealt with the psychology of thinking and experimental self-observation. The article closes with a discussion of psychology as a branch of science, and the need for better methods of presenting it.—A. B. Herrig (Michigan Central State Teachers College).

4896. Roback, A. A. Dr. Robert Saudek. *Character & Pers.*, 1935, 3, 263-269.—Saudek, the leading graphologist of our time, died April 15, 1935, at the age of 54 years. A photograph is included.—M. O. Wilson (Oklahoma).

4897. Robinson, E. S., & Kirk, V. Introduction to psychology: with special applications to nursing and nursing problems. New York: Macmillan, 1935. Pp. 368. \$2.50.—This textbook, containing 15 chapters, is divided into 6 parts and was written to make available for the nursing profession a sound knowledge of general psychology and its relationship to nursing and nursing problems. Part 1 presents an exposition of the subject matter, methods, and uses of psychology and the physical and neurological background and the special organs involved in behavior and mental life. Part 2 is devoted to a discussion of habits and their acquisition, discussing reflexes, habits and their formation, fixation, elimination, and operation. The problems of perception and attention are elaborated in Part 3, and those of ideation, concept formation, memory, imagination, and reasoning in Part 4. Emotion or feeling is discussed in regard to differentiation from cognition, as well as its origin, development, and relationship to activity, in Part 5. Part 6 deals with the problem of the individual as a whole, elaborating upon personality and its organization, individual abilities, simple, complex and general, and their measurement and the methods of evaluating the measurements obtained. 55 illustrations are included in the text and to each chapter is appended a summary, a list of problems, and a list of references. The book is indexed.—M. H. Erickson (Eloise Hospital).

4898. Ross, T. Machines that think—a further statement. *Psychol. Rev.*, 1935, 42, 387-393.—A description of an improved "memory cell," a machine consisting of a glass needle, mounted on a solenoid

piston, which, when activated by the "stimulus" circuit, punches holes in a paper which moves back and forth underneath an aperture. Beneath the paper is a photoelectric cell controlling a response circuit, which is energized whenever the hole in the paper is directly above the aperture. By a combination of such units, effects can be obtained which are analogous to simple and conditioned responses, i.e. "memory."—*A. G. Bills* (Chicago).

4899. Scheidt, W. *Biologische Psychologie. Teil I, Psychomechanik.* (Biological psychology. Part I, Psychomechanics.) Hamburg: Hermes, 1934. Pp. 154. RM. 7.50.—The introduction points out the impossibility of making "absolutistic" statements regarding the nature of things. Perception depends on the mutual relation of subject and object or of subject, objects and relationships between the objects. From this follows the "correlativistic" viewpoint which will be maintained throughout the remaining parts of this work. The remainder of this first volume applies this viewpoint to physiological optics. The author introduces the theory of synalaxis: a stepwise, accumulative arrangement of conduction, which is especially fruitful when applied to the functions of the central nervous system. From a synallactic conception of the visual apparatus follow a number of new interpretations of the phenomena of physiological optics, especially with regard to color vision. For example, hereditary color-blindness is considered as probably depending on differences in size of the optical cornea zones.—*W. Gottschick* (Hamburg).

4900. Seifert, F. *Zum Verständnis der anthropologischen Wende in der Philosophie.* (Contribution to an understanding of the new anthropological era in philosophy.) *Bl. dtsh. Phil.*, 1935, 8, 393.—The philosophical re-discovery of man is especially significant in the re-orientation of modern thinking. Typical of this is the fate of Husserl's de-humanization of philosophy, which his pupils Scheler and Heidegger modified by an orientation toward empirical reality. This re-discovery of man is based partly on extreme self-negation (Kierkegaard, Nietzsche) and partly on the motive of cosmic life, whose categorical extent is determined by the paired concepts consciousness-life, conscious-unconscious, logos-bios. This latter problem is solved dualistically by Freud, comprehensively by Klages. To Klages, the complete antagonism of these vital forces and the pessimistic concept of mankind's auto-disintegration are essential. Scheler first shows the beginning of dialectic interpretation, which finds its completion in Jung's psychological system.—*P. Klimpel* (Leipzig).

4901. Steenbergen, C. A. *Bibliographie van de in Nederland gedurende 1933 verschenen boeken en tijdschriften op psychologisch gebied.* (Bibliography of books and journals in the field of psychology which appeared in the Netherlands during 1933.) *Ned. Tijdschr. Psychol.*, 1933, 1, 471-488.—(Not seen.)—*H. Beaumont* (Kentucky).

4902. Urban, W. M. *James Mark Baldwin, co-editor of Psychological Review, 1894-1909.* *Psychol.*

Rev., 1935, 42, 303-306.—Baldwin's professional life coincides with the rapid expansion of psychology in America. His most important contributions were in furthering the functional and genetic viewpoints, with resultant contributions to child and social psychology. His contributions to philosophy centered about a genetic theory of logic and reality, related to the "emergent evolution" viewpoint. His long residence in Paris made him a mediator between European and American cultures, and an interpreter of American thought on the continent.—*A. G. Bills* (Chicago).

4903. Van der Horst, L. *Over de methodiek der psychologie.* (Psychological methods.) *Ned. Tijdschr. Psychol.*, 1933, 1, 40-53.—(Not seen.)—*H. Beaumont* (Kentucky).

4904. Van der Horst, L. *Grenzen en mogelijkheden der moderne psychologie.* (Limitations and possibilities of modern psychology.) *Ned. Tijdschr. Psychol.*, 1933, 1, 97-112.—(Not seen.)—*H. Beaumont* (Kentucky).

4905. Van der Horst, L. *Accentverschuiving in de biologie.* (Change of emphasis in biology.) *Ned. Tijdschr. Psychol.*, 1933, 1, 193-213.—(Not seen.)—*H. Beaumont* (Kentucky).

4906. Van der Horst, L. *Lessen in de hedendaagsche psychologie: I, II.* (Lessons in contemporary psychology: I, II.) *Ned. Tijdschr. Psychol.*, 1933, 1, 298-314; 385-399.—(Not seen.)—*H. Beaumont* (Kentucky).

4907. Van Essen, J. *De zielkunde als wijsgeerige wetenschap.* (Psychology as a philosophical science.) *Ned. Tijdschr. Psychol.*, 1933, 1, 1-29.—(Not seen.)—*H. Beaumont* (Kentucky).

4908. Van Essen, J. *De psychologie van den zelfstrijd.* (Psychology of the ego struggle.) *Ned. Tijdschr. Psychol.*, 1933, 1, 113-144.—(Not seen.)—*H. Beaumont* (Kentucky).

4909. Verlaïne, L. *La psychologie des conduites.* (The psychology of conducts.) *Scientia, Bologna*, 1935, 57, 285-296.—The psychology of conduct has for its object experimental study to create a natural history of behaviors. Instead of proceeding subjectively from man to animal, it finds it necessary to proceed by objective means in the inverse manner. The fundamental laws which reveal an animal psychology to the biologists appear to be equally applicable in human psychology. If these laws are in contradiction with those laws revealed by introspection it is probable that introspection is deceiving us; and if the language of traditional psychology seems to be inadequate to explain behavior, this language fails to reveal the objectivity of the facts, whether they apply to man or to animal. All of the values of old-fashioned psychology will, therefore, need to be revised. The author of the present study wishes to give a brief survey of the problems that separate the philosopher and the experimenter today, in this very complex domain of making determinations of psychological phenomena.—*L. S. Selling* (Wayne).

4910. Wheeler, R. H. **Organismic vs. mechanistic logic.** *Psychol. Rev.*, 1935, 42, 335-353.—The author conceives of the history of thought—scientific, political, economic, esthetic, philosophical, moral, and religious—as consisting in a struggle between the mechanistic and the organismic points of view. The former is identified with scientific atomism, political chaos, utilitarian morality, religious agnosticism and philosophical materialism. The latter is associated with idealism, religious faith, political harmony, teleological science, and moral law. The struggle between the two has led to recurrent cycles in which one or the other has dominated. A list of 70 "postulates" is given contrasting the organismic with the mechanistic vitalistic logic. The author believes that permanent harmony will be attained some time before 2000 A. D.—A. G. Bills (Chicago).

4911. Windischer, H. **Beitrag zum Problem der inneren Erfahrung.** (Contribution to the problem of self-inspection.) *Arch. ges. Psychol.*, 1935, 93, 383-444.—This article is a philosophic treatise, although descriptive. It contrasts innate and objective observation and analyzes three levels of innate experience. It asks whether the self withdraws in self-observation as it does in objective observation, and discusses the "act theory" and the "identity theory" of self-recognition. It analyzes the Brentano theory and denies that there is in self-observation any degree of consciousness of self as such. Ebbinghaus' analysis is criticized, and an effort is made to see relationship between circumstance as met and actual experience. Schele's concept of the *Idole* is analyzed. The article closes with a discussion of soul in self-observation.—A. B. Herrig (Michigan Central State Teachers College).

[See also abstracts 4931, 4939, 5019.]

SENSATION AND PERCEPTION

4912. Abe, S. **Neue Untersuchung über die absoluten Eindrücke im Gebiete der wahrnehmbaren Zeit.** (A new research on the absolute impression in the sphere of perceivable time.) *Tohoku psychol. Folia*, 1935, 2, 145-180.—Time intervals which are perceived neither as too long nor too short, but as moderate and feeling quite agreeable, are nothing but those that are given us unconsciously, or (in the terminology of Chiba) in a state of proper consciousness, and are adapted to satisfy in the end "something unconsciously expected."—R. Kuroda (Keijo).

4913. Bárány, E. **Über die Bedeutung der Knochenleitung für das Hören von Luftschall.** (The significance of bone conduction for the hearing of air sounds.) *Acta Oto-Laryng., Stockh.*, 1935, 22, 229-233.—A mathematical formula is given for determining the vibration of the head during bone conduction, depending on the radius of the head. A patient with impaired hearing due to poor conduction was able to hear no worse with her ears plugged than before.—M. B. Mitchell (New Hampshire State Hospital).

4914. Bárány, R., & Bárány, E. **Etudes audiométriques avec chapitre statistique et appendice mathématique.** (Audiometric studies with a statistical

chapter and mathematical appendix.) *Acta Oto-Laryng., Stockh.*, 1935, 22, 201-228.—The tuning fork is usually adequate for determining the auditory threshold for clinical use, but the audiometer is necessary for more accurate research. One of the chief advantages is that it gives short rather than prolonged stimuli. The normal deviations in threshold were determined by examining the same subject at different times. A prothesis of cellophane ameliorated the perception of low tones more than of high tones, while a paraffin plug ameliorated the perception of high tones more than of low tones. Tables, graphs, mathematical formulae, and bibliography.—M. B. Mitchell (New Hampshire State Hospital).

4915. Börnstein, W. **Ueber die funktionellen Beziehungen der Sinnesorgane untereinander und zum Gesamtorganismus.** (The functional relations of the sense organs to one another and to the total organism.) *Ned. Tijdschr. Psychol.*, 1933, 1, 331-334.—(Not seen.)—H. Beaumont (Kentucky).

4916. Boström, C. **Några ord om det nya färföringssättet vid färgsinnesundersökningar.** (Some observations on the new procedure for testing color blindness.) *Hygiea, Stockh.*, 1935, 97, 465-470.—The Holmgren worsteds test, which has been official in Sweden since 1882, was discarded by the Royal Medical Department in November of this year as open to variations in method and involving several sources of error. At the International Congress of Oculists at The Hague, 1929, it was recommended that at all times at least two different series of pseudo-isochromatic scales be used, and more if possible (Stillings and Ishihara's mentioned as compulsory). The writer on the whole commends both Stilling and especially Ishihara, but calls attention to certain drawbacks in both scales, such as the possibility of color-blind subjects deceiving the examiner by learning the material by heart in advance (available as it is in general bookshops). The writer was called upon by the Swedish Royal Medical Department in 1929 to give his expert advice for new procedure for the testing of color blindness. With the cooperation of several colleagues, he has constructed pseudo-isochromatic charts which are now official in Sweden and which include charts for the detection of simulators, etc. These new tests are said to be easily administered and very reliable in their results.—M. L. Reymert (Mooseheart Laboratory for Child Research).

4917. Bruce, G. M. **Ocular divergence: its physiology and pathology.** *Arch. Ophthalm., Chicago*, 1935, 13, 639-660.—The author suggests the phylogenetic development of convergence and divergence, discusses theories concerning the actions of the internal and external recti in divergence, notes the symptoms associated with paralysis of divergence, divergence insufficiency and divergence excess, and concludes that there is a center for divergence separate from but adjacent to the abducens nucleus and probably located in the midline. Supporting arguments are mainly as follows: the dominating function of fusion requires active divergence as well

as convergence; divergence occurs in a manner which implies innervation of the external recti as well as relaxation of the internal recti; lateral excursions remain normal in divergence excess and insufficiency and are at first normal in divergence paralysis, though paralysis of the external recti frequently follows the last.—*M. R. Stoll* (Massachusetts Eye and Ear Infirmary).

4918. *Erismann, T.* Die Empfindungszeit. (Sensation time.) *Arch. ges. Psychol.*, 1935, 93, 453-519.—The author seeks to measure the sensation period, the time element from stimulation to recognition as sensation. He reveals the difficulties accompanying such experimentation in the various sensory fields, and gives praise to the exact measurements of the Fröhlich school. Their experimentation is reviewed and compared with those of Hess and Hazelhoff; the various methods of measurement are evaluated and their agreements and disagreements noted.—*A. B. Herrig* (Michigan Central State Teachers College).

4919. *Franklin, P.* The deaf-mute. *Lancet*, 1935, 228, 316-318.—The author describes methods which are employed in the treatment of the deaf. Many deaf-mutes have some degree of residual hearing which should be exploited by early training.—*D. J. Ingle* (Mayo Foundation).

4920. *Fry, G. A., & Bartley, H.* The effect of one border in the visual field upon the threshold of another. *Amer. J. Physiol.*, 1935, 112, 414-421.—The effects of borders on the differential intensity threshold between two areas were investigated by the use of various patterns. It was found that with concentric circular areas the decrease in differential threshold which was attributed by Blachowski to an increase in area, could be obtained without change of area, but by varying the distance between the innermost circle and a black circular border lying in the outermost test area. Since the presence or absence of a ring of the test area outside this black circle made no difference in the effect, it was concluded that the inside border blocked any effect from the outside border of the black circle. Using disk-shaped areas, the difference in threshold disappeared at a separation of the borders which corresponded to that found with the concentric areas and circle (4° of visual angle). The effect of varying the intensity of the field surrounding two test areas was investigated by a similar technique, and it was found that the differential threshold is a minimum when the surrounding intensity equals the intensity adjoining it. In general it was found that an activating border on the side of the test border raises the threshold, while an activating border operating on the ends of the test border lowers it, and, furthermore, that the activity of one border on a second (test border) may be blocked by a third border between them. The work was done with one subject.—*T. W. Forbes* (N. Y. Psychiatric Institute).

4921. *Fujita, T., Hosoya, Y., & Hashimoto, K.* Ueber die binokulare Reiz- und Helligkeitssum-
tion. Vorläufige Versuche. (On the binocular

summation of stimulus and brightness. Preliminary experiments.) *Tohoku psychol. Folia*, 1935, 2, 181-222.—Brightness and threshold in connection with binocular and monocular vision were compared in a state of complete dark adaptation with objects laid 15° eccentrically. It was shown that in peripheral vision brightness discrimination as well as sensitivity of the eye is decidedly better in binocular than in monocular vision when extreme adaptation in darkness is attained.—*R. Kuroda* (Keijo).

4922. *Gabriels, J. A. C.* The calculation of loss of vision. *Arch. Ophthalmol., Chicago*, 1935, 13, 635-636.—The author defends the use of the Snellen chart but claims that acuity is measured actually in terms of surface; i.e., as ability to distinguish an area of equal length and breadth. Hence loss of vision is calculated as follows: if acuity is 20/30 or 6/9, loss is $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4} = 11.1\%$.—*M. R. Stoll* (Massachusetts Eye and Ear Infirmary).

4923. *Graham, C. H., & Hartline, H. K.* The response of single visual sense cells to lights of different wave lengths. *J. gen. Physiol.*, 1935, 18, 917-931.—The effect of various wave lengths of visible light in the stimulation of single visual sense cells has been studied by means of the single-fiber preparation from the eye of *Limulus*. There is no Purkinje effect in the response of the single sense cell. The visibility curve is symmetrical, with a maximum at about λ 520 m μ , and falls off to low values in the red and violet. Differential sensitivity to wave length has been found to exist in populations of sense cells in the eye of *Limulus*.—*C. H. Graham* (Clark).

4924. *Hausmann, G. VI.* Zur Aktualgenese räumlicher Gestalten. (The actual origin of space perception.) *Arch. ges. Psychol.*, 1935, 93, 289-334.—The author attacks the problem of Gestalt perception by studying reproduction of short-time exposures of three-dimensional blocks. He cites other studies made in the field, especially those of Sanders with two-dimensional figures. The article contains many cuts showing placement of blocks after a succession of exposures, and describes the process resorted to, the attitudes taken, and the remarks made. It is found that the Gestalt perception is largely determined by the mental set, is first seen as an indefinable whole, gradually clarifying, after several exposures, as to details. All Gestalt perception is embedded in endogenous factors, only slowly releasing itself with a completely objective experience.—*A. B. Herrig* (Michigan Central State Teachers College).

4925. *Hecht, S.* A theory of visual intensity discrimination. *J. gen. Physiol.*, 1935, 18, 767-789.—Unlike previous theories, this theory predicts that the fraction $\Delta I/I$ does not increase at high intensities of illumination. It describes quantitatively the intensity discrimination data of the bee, the fruit-fly, the clam, and the human being. The order of the hypothesized reactions varies for the different animals.—*C. H. Graham* (Clark).

4926. *Henneman, R. H.* A photometric study of the perception of object color. *Arch. Psychol., N. Y.*, 1935, No. 179. Pp. 88.—The object of the present

study was to investigate certain conditions underlying the phenomenal constancy of white objects standing in a region of shadow. The apparent whiteness of the shaded test disk was found to be influenced by (1) remote backgrounds beyond immediate backgrounds of the test disks, (2) the number of smaller dark objects placed in the field near the standard disk, (3) the size of such objects, (4) the albedo-difference between such field objects and the standard. Individual differences reveal that they cannot be reduced by changes in field complexity or changes in exposure time, or eliminated by knowledge of conditions. Brightness and color relations of the test object to its environment are held to be of paramount importance. Attitude of observation must be admitted as a second principal factor in the perception of object color.—*E. M. Achilles* (Columbia).

4927. Hinnen, A. B. *Onderzoekingen van het gehoororgaan volgens de methode van Wever en Bray.* (Investigations of the organ of hearing by the method of Wever and Bray.) *Ned. Tijdschr. Geneesk.*, 1935, 79, 1337-1341.—Wever and Bray found that the electric phenomena occurring in the auditory nerve and near the cochlea have the same frequency as the sound itself. It might be asked what causes these phenomena, whether they are an index of the acoustic process, and what their correlation is with what is actually heard. Rademaker found in experiments with decerebrated cats that the electric cochlea vibrations are probably imparted to the auditory nerve. According to the volley theory the individual nerve fibers have different refractory periods, so that it is probable that during each sound vibration some fibers are in the excitable phase and respond with a nerve impulse. This is in accord with the newer findings of nerve physiology, such as the phenomena of the refractory stage, the all-or-none principle, and the intensity-frequency principle.—*H. Beaumont* (Kentucky).

4928. Isakowitz, J. *Ein grundsätzlicher Einwand gegen die von Pflugk'sche Akkommodationstheorie.* (A basic objection to von Pflugk's theory of accommodation.) *Klin. Mbl. Augenheilk.*, 1934, 93, 196-200.—The author compares the Helmholtz-Hess theory of accommodation and that of Tscherning (1892)-von Pflugk. According to the former, accommodation is caused by the relaxing of the lens; according to the latter, by active tensing. Hence, for Tscherning-von Pflugk, ciliary muscle contraction and accommodation are the same process. However, consideration of the instance of accommodation in the aging eye shows us that the forty-year-old individual, whose near accommodation-point is at 25 cm. distance, would then suffer maximal strain when reading. Reading would cause him as much strain (subjective difficulty, eyes turning inwards) as steady monocular reading at a distance of 7 cm. (his near accommodation-point) would to the ten-year-old. This is by no means the case, from which Isakowitz concludes that Pflugk's theory of the active part played by the lens in accommodation is incorrect.—*J. Deussen* (Markkleeberg).

4929. Judovich, B. D. *For the relief of pain: a preliminary report on a new therapy.* *Med. Rec.*, N. Y., 1935, 141, 583-584.—An aqueous solution containing a mixture of amines derived from the carnivorous pitcher plant, *Sarracenia purpurea*, injected locally in the vicinity of the nerve supplying the painful area in cases of neuritis, neuralgia and muscular pains, effects the following advantages: (1) relief of pain, often for years, (2) absence of tissue destruction, (3) no action upon motor nerves, (4) absence of reactions, (5) no contra-indications. Use of this preparation may be found in standard texts of regional anesthesia. Case reports submitted by various physicians are cited to illustrate the efficacy of this preparation.—*M. H. Erickson* (Eloise Hospital).

4930. Kellner, A. W. *Vom Ferngefühl.* (On distance sensitivity.) *Umschau*, 1934, 38, 929-930.—The author does not attribute the often extraordinarily finely developed sense of direction and space orientation possessed by blind or blind-deaf individuals to a "sixth sense" (as Spallanzani has shown to be the case for the bat), but explains it by the special practice and development of the touch organs lying in the skin of the forehead and temples. Air currents and changing air density are the connection between object and sense organ.—*J. Deussen* (Markkleeberg).

4931. Kleinknecht, F. *Methoden zur Erforschung des Kochlearapparates.* (Research methods for the functions of the cochlea.) *Handb. biol. ArbMeth.*, 1934, Abt. 5, Teil 7, 1541-1660.—Methodological and technical rules with regard to experimental animals, research instruments, learned (training, conditioned reflexes, etc.) and reflex reactions, biological responses of non-reflex character, artificial modifications of normal situations, follow-up surgical investigations in dead animals, investigation of parts of the auditory apparatus (perilymph, its pressure, membrane), and physico-technical models to represent the functions of the cochlea. Extensive bibliography in text.—*Z. Piotrowski* (Columbia).

4932. Leiri, F. *Über Mikrophoneffekte im Ohr.* (The microphone effect in the ear.) *Acta Oto-Laryng., Stockh.*, 1935, 22, 111-123.—This is a review of the more recent work on hearing concerning the Wever and Bray findings of a microphone effect in the ear. The author believes the effect is due to an electrical stream set up in the blood vessels between the negative pole in the vestibular end of the basilar membrane and the positive pole at the other end of the cochlea. Bibliography.—*M. B. Mitchell* (New Hampshire State Hospital).

4933. Macfarlan, D. *Hearing aids.* *Med. Rec.*, N. Y., 1935, 142, 36-37.—There are two types of hearing aids — non-electrical and electrical. The former are simply sound collectors and transmit sound without distortion, but are disliked because they are conspicuous. The electrical aids are based on the principle of the telephone circuit. Distortion of sound is frequent. A recent advance has been the development of a bone conduction receiver. As yet

the development of hearing aids is in the stage of trial and error. The author then lists five of the leading hearing aids on the market.—*M. H. Erickson* (Eloise Hospital).

4934. Marlow, F. W. *Muscle imbalance in myopia.* *Arch. Ophthalm., Chicago*, 1935, 13, 584-597.—The author finds that simple myopia is practically nonexistent, since in no case could he positively exclude astigmatism, anisometropia and muscle imbalance. These complications appeared more frequently than among hyperopes. After reviewing theories as to the causative factors in myopia, the author briefly reviews a few cases of progressive myopia where occlusion demonstrated considerable latent imbalance, particularly hyperphoria and exophoria; partial correction of the imbalance by prisms appeared to slow down the increase in myopia or even to reduce the error.—*M. R. Stoll* (Massachusetts Eye and Ear Infirmary).

4935. McLachlan, N. W. *Noise: a comprehensive survey from every point of view.* London: Oxford Univ. Press, 1935. Pp. vii + 148.—The author gives an account in relatively untechnical terms of the main available methods of measuring and analyzing noise, of the main sources of noise in modern life, and of some of the physiological and psychological effects of exposure to noise.—*F. C. Bartlett* (Cambridge, England).

4936. Metfessel, M., & Joel, W. *Types of apparent movement (including the phi phenomenon).* Chicago: Stoelting, 1932. 1 reel, 241 ft., 16 mm. \$22.20 sale.—Produced by the University of Southern California. A clock dial having disks and figures is the basis of the demonstration. Part A demonstrates the effects of time and distance upon the phi phenomenon. Part B shows the phi phenomenon occurring in opposite directions simultaneously as a check on the hypothesis of eye movements. In Part C movement in the third dimension is shown by (1) beta movement, a shrinking or expanding, or a forward and back movement of a disk which changes in size; (2) effect of interposed stimulus to determine whether the movement goes through, in front of or in back of the additional figure; (3) Steinig's figure may show either a rotating semi-circle (forward or backward) or a "flopping" up and down movement. Part D illustrates Wertheimer's test of attitude, by building up an expectation to go to one side by progressively longer jumps, and then tests by presenting the second disk directly opposite the first on the clock dial to see the path of movement under these conditions.—*R. H. Seashore* (Oregon).

4937. Metfessel, M., & Musgrave, H. *Measurement of Müller-Lyer illusion.* Chicago: Stoelting, 1932. 1 reel, 47 ft., 16 mm. \$4.00 sale.—Produced by the University of Southern California. A Müller-Lyer figure is shown with one side adjusted by 11 stages from one extreme to the other in each of five trials. The student records the number (not given in regular order) of the stage giving approximate equality. The film can be re-run to give more trials.

The *Student's Guide* gives representative results.—*R. H. Seashore* (Oregon).

4938. Metfessel, M., & Warren, N. *Range of visual perception.* Chicago: Stoelting, 1932. 1 reel, 50 ft., 16 mm. \$4.25 sale.—Produced by the University of Southern California. This film takes the place of a tachistoscope in presenting a series of 16 combinations of ten letters each. Four types of combinations are nonsense syllables, unrelated consonants, unrelated words, and related or single familiar words. Representative results are published in the *Student's Guide*, p. 70.—*R. H. Seashore* (Oregon).

4939. Miller, D. C. *Anecdotal history of the science of sound: To the beginning of the 20th century.* New York: Macmillan, 1935. Pp. 114. \$2.50.—The present book is an expanded form of the author's presidential address, 1932, before the Acoustical Society of America. It contains a short bibliography and 15 illustrative plates.—*W. S. Hunter* (Clark).

4940. Morinaga, S. *Ueber die Blickrichtung und die Mondtäuschung.* (On visual direction and the moon illusion.) *Jap. J. Psychol.*, 1935, 10, 1-25.—The purpose of the experiment was to examine the influence of direction on the perception of size and distance and to test the validity of the theory of convergence concerning "eye-direction" used as an explanation of the horizon illusion. Putting the observer's body upright, horizontal and with inclination of 45° from the horizontal, white disks of various sizes as stimuli were shown in various directions, upward, forward, downward, etc., for each of these postures, and equivalents of the size and distance of these stimuli for each direction were calculated always in comparison with the forward direction from the body. The modes of observation on each posture were two, moving the eye only, and moving the head without any eye movement. The results were as follows: (1) The perception of size and that of distance were both determined by direction, although there was some interrelation between them, but the former could not be reduced to the latter or vice versa. (2) When the posture was upright, the size of the stimulus in the forward direction appeared the largest, but in other postures the stimulus in the objectively horizontal direction was always perceived as larger than the stimulus in the objectively upward direction, regardless of the eye direction. The author came to the conclusion that the theory of convergence was true only in case of upright posture, but generally speaking the perception of size was determined by the objective direction rather than by the eye direction. This condition of objective direction seemed to be one of the conditions of the horizon illusion.—*S. Morinaga*.

4941. Nowik, E. *Über die Methoden der Entwicklung der Gehörsaufmerksamkeit bei taubstummen Kindern.* (The methods of developing the auditory attention in deaf and dumb children.) *Acta Otolaryng., Stockh.*, 1935, 22, 24-31.—A description is given of the method of training in the school for deaf and dumb children at Rostov-on-Don. First high,

medium, and low tones are conditioned by simultaneous presentation with a red, green, and yellow light respectively. Next there is a secondary conditioning to raising right, left, and both hands. The subject is then familiarized with the voice of the teacher through a microphone, loudspeaker, and ear phones. Next lists of five words printed on wax paper are presented in a frame. Behind the paper are two rows of lights, two for each word. The ones on the left are colorless. The teacher turns on the one in back of the word he pronounces. As the pupil recognizes it, he pushes a button turning on the corresponding colored light in back of the word. Finally charts containing more words are presented so that the child identifies two and then more words at a time. The words thus learned can later be dictated to the pupil without the lights so he can learn to write and repeat them orally.—*M. B. Mitchell* (New Hampshire State Hospital).

4942. **Paton, R. T.** Device for training children to overcome strabismus. *Arch. Ophthalm., Chicago*, 1935, 13, 636-638.—Because young children are frequently unable to handle pencils with facility, as a substitute for tracing devices it is proposed to use simple patterns which the child can duplicate by placing small sticks in stencil slots or by inserting pegs in a punch board.—*M. R. Stoll* (Massachusetts Eye and Ear Infirmary).

4943. **Piéron, H.** Le processus du métacontrast. (The process involved in "after-contrast.") *J. Psychol. norm. path.*, 1935, 32, 5-24.—The experimental results of Stigler and Fry are reviewed. By the method of revolving disks the author studied the problem and agreed with Fry that the kind of light involved has no bearing on the phenomena of after-contrast, as is verified by the use of Wratten filters. The various aspects of the phenomena seem to proceed from modalities of integration on a perceptual level; they arise from a Gestalt-like structuration which rests on a fundamental retinal process. An analysis of the physiological mechanism involved is valuable for its theoretical significance in understanding perception in general.—*P. S. de Q. Cabot* (Harvard).

4944. **Riddell, L. A.** Local adaptation to flicker and its relation to light adaptation. *J. Physiol.*, 1935, 84, 111-121.—The author presents evidence that in man adaptation to flicker is not the same as adaptation to light. Adaptation to flicker is not found in the frog's eye. The latter is considered supporting evidence that the phenomenon may be cerebral.—*M. A. Rubin* (Clark).

4945. **Robertson, C. J.** A comparative study of the measurement of the speed of adjustment of the eye for near and far vision. *Nav. med. Bull., Wash.*, 1935, 33, 187-205.—Convergence times for 247 airplane pilots and 106 non-pilots were measured. A consistent increase in the time required to adjust from near to far and back to near vision was found to be associated with increasing age in both experimental groups, although the non-pilots were slower at all ages. The speed of adjustment is also affected by

anomalous eye conditions, exophoria, and inequality of visual acuity between the two eyes. The value of this measurement in the selection of aviators is pointed out.—*C. M. Louttit* (Indiana).

4946. **Takano, K.** Contrast of sound. II. *Tohoku psychol. Folia*, 1934, 2, 1-13.—Contrast is a tonal phenomenon which is independent of other phenomena. It occurs especially in a definite relation of tonality, and if we examine the reports regarding the changes toward higher or lower, these are found to be almost all changes of *seidaku* (purity and impurity), *daishō* (large and small), and mean contrast of *seidaku* and *daishō*. "Pitch is a concrete and whole concept," and "a proposition that *seidaku* and *keijū* (light and heavy) can be considered as a substance of pitch (high and low) might be right in a sense. As even in successive noises which have only the characteristics of *seidaku* and *daishō*, an interval seems to be formed, I think that these contrast phenomena also have been mistaken for a change of pitch, because two tones were produced successively."—*R. Kuroda* (Keijo).

4947. **Tansley, K.** The staining of the light- and dark-adapted retina. *J. Physiol.*, 1935, 84, 34P-35P.—From staining experiments on frog and rat retinae it appears that dark adaptation alters the chemical composition of the retinal tissue. This alteration is probably more than a simple change in pH.—*M. A. Rubin* (Clark).

4948. **Trendelenburg, W., & Schmidt, I.** Untersuchungen über Vererbung von angeborener Farbenschwäche. Zugleich ein Beitrag zur Theorie der Farbensysteme. (Studies in the hereditary transmission of innate color weakness, and a contribution to the theory of color systems.) *S. B. preuss. Akad. Wiss.*, 1935, No. 2, 13-81.—129 cases of color anomalies were investigated to determine whether the same types of anomaly (protanomaly and deuteranomaly) tended to be maintained in the same hereditary strain, or whether they merged into each other or might even alternate with color blindness. The results of other writers are reviewed. In this investigation, a strict distinction was made between the neutrally tuned ("unfatigued") and the *umgestimmte* ("fatigued") states. Fatiguability does not belong to the essence of a color anomaly, for it may be found in otherwise normal trichromats; but as a study of identical twins shows most clearly, it too is subject to heredity. The various forms of color weakness do not merge into each other in the same hereditary strain. These results agree with those of Waaler, who has posited a special hereditary basis for each of the principal forms of color weakness. The results provide support for certain color theories taking their point of departure from Helmholtz.—*W. Trendelenburg* (Berlin).

4949. **Zlatoverov, A. J.** [Clinical observations of the symptom of space disorientation.] *Sovetsk. Nevropatol.*, 1935, 4, No. 3, 65-72.—The right valuing of the symptoms of space orientation in internal (body-sense) and external space can be based only on the conception of the activity of the nervous system as a unit, not denying the qualitative difference and

different value of separate parts of the nervous system. The conception of space orientation is a complex one and it is useless to seek the localization of this complex structure or the center for space perception. The right space orientation depends not only on normal functioning of the peripheral receptors but also on the intactness of the higher frontoparietal areas.—*A. Yarmolenko (Leningrad).*

[See also abstracts 4878, 4882, 4899, 4970, 5042, 5052, 5060, 5061, 5234, 5248, 5319.]

FEELING AND EMOTION

4950. Centola, B. R. *La paura.* (Fear.) Napoli: Tip. S. T. E. M., 1934. Pp. 46.—Phenomena which are characteristic of fear. Predisposing and determining factors; effects and alterations resulting from fear in the human organism. Education in connection with fear.—*G. M. Hirsch (Rome).*

4951. Findlay, J. N. *Emotional presentation.* *Aust. J. Psychol. Phil.*, 1935, 13, 111-121.—The conception of "emotional presentation" comes from Meinong, as an adjunct to his peculiar theory of "contents" of consciousness. These contents are modifications of consciousness in various directions; these present objects or properties to consciousness. Emotional presentations are properties of objects but are nevertheless not precisely objective. They are also not subjective in the sense of Hume's esthetics. The experience of such presentations is denoted by a large number of adjectives that are ordinarily applied when emotional effects are felt. Since emotional presentations seem to belong more to objects, they are distinguished from cases of *Einfühlung*. The present author rejects Meinong's explanation of emotional presentations, proposing instead a theory of shift of attention. There is a discussion of the value aspects of the concept.—*H. D. Spoerl (Northeastern).*

4952. Goldstein, K. *Ueber das Phaenomen der Angst.* (The phenomenon of anxiety.) *Ned. Tijdschr. Psychol.*, 1933, 1, 434-454.—(Not seen.)—*H. Beaumont (Kentucky).*

4953. Hunt, W. A. Discussion: Professor Gray's 'objective theory of emotion.' *Psychol. Rev.*, 1935, 42, 394-397.—The author objects to Gray's definition of the subjective emotion as proprioceptive content from the bodily disturbance, and to his misinterpretation of the findings of Cantril, Landis, and Hunt on emotional phenomena from adrenal injections, as supporting this definition. The author feels that the distinctive subjective quale is not explained by the experienced bodily disturbance, but by the perception of the meaning of the stimulus situation, i.e. the "implicit verbal response attendant upon the emotional cognition."—*A. G. Bills (Chicago).*

4954. Peters, H. N. *The judgmental theory of pleasantness and unpleasantness.* *Psychol. Rev.*, 1935, 42, 354-386.—Theories of feeling are either functional or analytical; Titchener's theory of pleasantness and unpleasantness as unique mental contents is of the latter type; Carr's judgmental

theory is of the former. According to it, feelings "are attributes we ascribe to any stimulating situation in virtue of our normal reaction tendency toward it," whether it is positive or negative. They are judgmental reactions based upon our past responses to the object in the same sense that the other cognitive reactions are judgments. They may or may not be accompanied by an emotional element. They are not unique experiences. The contradictory results of introspective studies of feeling are due to the fact that feelings are not strictly subject to introspection, since they are not content but meanings. The questions asked about them were futile. But certain significant functional problems have been answered, such as the effect of training on feelings, and the influence of feeling-tone on memory. The theory is in harmony with present-day tendencies, and is prognostically sound in pointing the way toward significant experimental attacks on the problem of feeling.—*A. G. Bills (Chicago).*

[See also abstracts 4968, 5348, 5411.]

ATTENTION, MEMORY AND THOUGHT

4955. Brandt, H. *The spread of the influence of reward to bonds remote in sequence and time.* *Arch. Psychol.*, N. Y., 1935, No. 180. Pp. 45.—The data from 23 educated young adults who participated in a learning experiment were analyzed to observe the extent and direction of the influence of rewards upon series of connections. The time interval between connections was varied. The increase in time interval resulted in a greater strengthening of the connection which the reward immediately followed and to which it was attached. The increase in the time interval between bonds did not affect the spread of the influence of a satisfying after-effect to proximal connections. The spread of the influence of the satisfying after-effect is more potent in a forward direction. This study pointed out the necessity for securing thousands or millions of connections in order to secure reliable determinations of all points on the spread curve.—*E. M. Achilles (Columbia).*

4956. Coirault, P. *Sur les dyades et triades dans la pensée et l'expression.* (Dyads and triads in thought and expression.) *J. Psychol. norm. path.*, 1935, 32, 83-90.—The principles of antithesis and of the middle and the extremes, creating respectively two and three categories of thought, seem to be both propaedeutic and superior to language. From the examples quoted, the dyad or pair seems to be fundamental. The introduction of the third term enables one to add innumerable degrees of comparison, intermediate between the original dichotomous contrasts.—*P. S. de Q. Cabot (Harvard).*

4957. Eisenson, J. *Confirmation and information in rewards and punishments.* *Arch. Psychol.*, N. Y., 1935, No. 181. Pp. 37.—Two experiments, one with words and one with pictures, were given and the results showed that differences existed. Punishments which yield annoyance plus specific information that a certain connection is a failure or an error do not influence learning appreciably more than punishments

which carry only annoyance. Learning does take place, even if information is withheld and nothing but the satisfying influence of the rewards operates, but the amount of learning is markedly increased when specific and usable information is added to the reward.—*E. M. Achilles* (Columbia).

4958. *Feiman, G.* [Eideticism and school-age.] Moscow: Biomedgiz, 1935. Pp. 72.—There are experimentally investigated the eidetic phenomena and their changes in connection with separate components of children's and youth's development. The percentage of eideticism in various ages is presented in an age-curve (9-18 years) where the two highest points are at 11 and 18 years. The display of eideticism is connected with the pubertal age. Author treats eideticism as a function of age-constitution, displayed in different grades and different age-phases. In the school-age the age-curve fluctuates, with a high point in the pubertal period (third phase of Martin). The eidetic phenomenon is displayed differently in various environmental conditions.—*A. Yarmolenko* (Lenin-grad).

4959. *Gerstacker, W.* *Die Phantasie in der neueren psychologischen Literatur. Zusammenfassung und Kritik.* (Imagination in recent psychological literature. Summary and criticism.) Friedberg-Augsburg: K. Bauer, 1935. Pp. xiv + 134.—Since this work is not limited to an exposition and criticism of theories and results to be found in the literature, it is arranged systematically rather than historically. On the basis of his own views and those of others, the writer attempts to set forth the essence of imagination, a classification of imaginal processes, and the points of view from which imaginal interconnections and the imaginative life of the individual may be described. More general questions are also considered.—*W. Gerstacker* (Munich).

4960. *Metfessel, M., & Warren, N.* *Reliability of memory.* Chicago: Stoelting, 1932. 1 reel, 40 ft., 16 mm. \$3.45 sale.—Produced by the University of Southern California. The film starts with a few flashes of nonsense syllables as a "blind" to conceal the real purpose. After a title, "Watch Carefully," a short action sequence from an R.K.O. commercial picture is shown, involving an automobile chase, crash and capture of persons. The *Student's Guide* contains 45 questions to be answered as true, false, or did not appear. Representative results from large classes are included.—*R. H. Seashore* (Oregon).

4961. *Müller, A. L.* *Das Gedächtnis.* (Memory.) Stuttgart: Franckh, 1934. Pp. 82. RM. 1.10.—*R. R. Willoughby* (Clark).

4962. *Musgrave, H., & Metfessel, M.* *Determiners of attention.* Chicago: Stoelting, 1932. 1 reel, 76 ft., 16 mm. \$7.25 sale.—Produced by the University of Southern California. The film consists of a series of twenty-five brief glimpses of a circle of letters, numbered like the face of a clock. A preliminary view of the clock face and letters is shown so that the students may become acquainted with the set-up. In each glimpse there is present one of five factors which ordinarily attract attention. The class is told to

observe the presentations passively, and after each one to record by the appropriate number the position of the letter to which their eyes were attracted. The five factors studied are magnitude, intensity, motion, quality, and repetition. Key in *Student's Guide*, p. 165.—*R. H. Seashore* (Oregon).

4963. *Nakano, S.* *Senkō keiken no tango no imi haaku ni oyobosu eikyo.* (Effect of preceding experience upon the grasp of meaning.) *Kyoiku Shinri Kenkyu*, 1935, 10, 216-232.—The fact that the comprehension of a series of words already read has some influence upon that of those that are about to be read shows that the former are accepted in a certain context, the latter being nothing other than the reader's own thought.—*R. Kuroda* (Keijo).

4964. *Pauli, R., & Wenzl, A.* *Grundsätzliches zur Gedächtnispsychologie: Untersuchungen zur Anfangs- und Endbetonung.* (Principles underlying the psychology of memory: investigations relative to the emphasis placed on initial and final factors.) *Arch. ges. Psychol.*, 1935, 93, 571-603.—Tracing the field of memory psychology back to Ebbinghaus and his experiments on economy and technique, the authors deplore the poverty of valuable contributions. They trace the findings of earlier investigations and give a forward look as to the possibilities of the field. An experiment is described investigating the phenomenon of more rapid learning of the beginning and end factors in a series, accompanied by tabulated presentation of the results and by graphs showing learning rapidity in memorizing.—*A. B. Herrig* (Michigan Central State Teachers College).

4965. *Ranschburg, P.* *Insuffizienzen des Gedächtnisses für Eigennamen und Personen.* (Inadequacies of memory for names and persons.) *Ned. Tijdschr. Psychol.*, 1933, 1, 412-433.—(Not seen.)—*H. Beaumont* (Kentucky).

4966. *Rock, R. T.* *The influence upon learning of the quantitative variation of after-effects.* *Teach. Coll. Contr. Educ.*, 1935, No. 650. Pp. xii + 78. \$1.50.—The problem investigated the relative influence upon learning of varying amounts of small cash rewards and punishments given as after-effects to particular connections. Three experiments are reported, two of code learning and one of tossing balls at a horizontal target. Subjects worked at maximum speed and in the first two experiments were paid in addition to the rewards. They worked individually for about one hour for each experiment. In each of the first two experiments, 75 subjects were used; 125 were used in the ball tossing. Rewards for an individual item varied from merely the word "right" to "right" plus .8 cent. The statement "right" was found to be about as effective as "right" plus reward. Larger money rewards were not significantly superior to lower ones. Rewards were more effective than punishment. The bibliography lists 4 titles.—*J. M. Stalnaker* (Chicago).

4967. *Susukita, T.* *Untersuchung eines ausserordentlichen Gedächtnisses in Japan.* (An investigation of an unusual memory in Japan.) *Tohoku psychol. Folia*, 1934, 2, 14-42.—In this research the

author investigated Ishihara's memory for names and nonsense syllables, with special reference to the relation between amount of memory materials and learning time, to retention, and to factors of unfavorable influence, and concludes that his mnemotechnique consists (being different from that of Diamandi) in transformation of nonsense materials into a meaningful architecture; hence complex formation constitutes its utmost importance. Firm impression, repeated reproduction, concentration of attention, a certain freshness, etc., may also be regarded as conditions of memorizing. According to his conviction, forgetfulness does not necessarily mean a complete extinction of residues, but only a transient hindrance to recollection.—R. Kuroda (Keijo).

4968. Susukita, T. Ueber das Gedächtnis für lust- und unlustbetonte Erlebnis im Alltagsleben. (On memory for pleasant and unpleasant experiences in daily life.) *Tohoku psychol. Folia*, 1934, 2, 43-56.—From diaries of 24 female students of a girls' high school (17-18 years of age) it was concluded that pleasant experiences excel unpleasant in the frequency of appearance in their daily life. The psychoanalyst's view that unpleasantness is a motive of forgetfulness is correct, but it must be added that it is not its sole cause.—R. Kuroda (Keijo).

4969. Van Dael, J. Bijdrage tot de psychologie van het getuigenis. (Contribution to the psychology of testimony.) *Ned. Tijdschr. Psychol.*, 1933, 1, 497.—(Not seen.)—H. Beaumont (Kentucky).

[See also abstracts 4898, 5019, 5201.]

NERVOUS SYSTEM

4970. Adler, A. Zur Topik der corticalen Geschmackssphäre. (The location of the cortical gustatory sphere.) *Z. ges. Neurol. Psychiat.*, 1935, 152, 25-33.—Numerous clinical observations have indicated that the somesthetic and gustatory fibers do not take a common route from the thalamus to the cortex; likewise the gustatory area does not appear to lie immediately adjacent to the somesthetic area in the opercular region of the central convolutions. A clinical case of a gustatory disorder without any somesthetic disturbance is described. The writer finds indications that the island of Reil is involved in taste, but also contends that other zones (apparently in the temporal lobes for the most part) may be intimately connected functionally with the gustatory projection area.—C. W. Fox (Rochester).

4971. Andreyev, L., & Pugsley, L. I. A study of the effects of hypercalcaemia produced by parathyroid hormone and irradiated ergosterol upon the activity of the cerebral cortex by means of conditioned reflexes. *Quart. J. exp. Physiol.*, 1934, 24, 189-206.—(*Biol. Abstr.* IX: 9313).

4972. Barron, D. H., & Matthews, B. H. C. Conduction in the spinal cord. *J. Physiol.*, 1935, 84, 9P-11P.—It is found that inhibition may occur in the central nervous system without the intervention of a synapse in the path in which the impulses are

blocked. A hypothesis is suggested in which the collaterals are responsible for the phenomenon (intermittent conduction in the posterior columns on continuous stimulation).—M. A. Rubin (Clark).

4973. Blair, H. A. The equation of the voltage-capacity curve for the excitation of the sciatic nerve of *Rana pipiens*. *Amer. J. Physiol.*, 1935, 112, 277-285.—The equation

$$V/R = \frac{1}{\text{crk} - 1}$$

which was developed in a previous article, was tested empirically using a 50,000-ohm non-inductive resistance and a mica condenser in the stimulating circuit, at temperatures from 11 to 28°. 81.8% of the observations fell within $\pm 3.5\%$ of the theoretically calculated value, which is only slightly greater than the estimated experimental error. A small systematic divergence occurred at the portion of the curve between 1.5 and 3.0 rheobases, but this was probably induced by the method of curve fitting used. It is felt that more elaborate methods of curve fitting will be justified only if some other equation is shown to fit the data equally well.—T. W. Forbes (N. Y. Psychiatric Institute).

4974. Brantmay, H. Remarques sur le rôle de l'hypophyse en psychiatrie infantile. (Remarks on the role of the hypophysis in juvenile psychiatry.) *Z. f. Kinderpsychiat.*, 1934, 1, 58-66.—The first of two articles discussing the hypophysis. Numerous case examples.—D. Shakow (Worcester State Hospital).

4975. Brantmay, H. Remarques sur le rôle de l'hypophyse en psychiatrie infantile. (Remarks on the role of the hypophysis in juvenile psychiatry.) *Z. f. Kinderpsychiat.*, 1934, 1, 86-91.—Completion of the article.—D. Shakow (Worcester State Hospital).

4976. Bronk, D. W., & Pumphrey, R. J. Response of a sympathetic ganglion to high frequency stimulation. *Proc. Soc. Biol., N. Y.*, 1935, 32, 1661-1663.—Preganglionic fibers in the third or fourth thoracic root were stimulated at a frequency of 60 per second by a thyatron stimulator and the impulse discharge from the stellate ganglion was recorded in the inferior cardiac nerve. With continued stimulation successive postganglionic spike potentials rapidly decrease in height. Certain evidence of continued activity in the postganglionic fibers argues against an explanation in terms of blocking at the ganglion. It is suggested that the impulses become temporally dispersed in postganglionic fibers and lose their synchronization, possibly because of an increase in the refractory period of the ganglion cells which differs from cell to cell or because of two types of synaptic transmission.—H. Peak (Randolph-Macon).

4977. Bronk, D. W., Tower, S. S., & Solandt, D. Y. Synaptic transmission in the stellate ganglion. *Proc. Soc. Biol., N. Y.*, 1935, 32, 1659-1661.—The question of whether each preganglionic volley sets up a single postganglionic volley or whether an independent rhythm is developed in the synapses of the ganglion

was studied by stimulating non-medullated preganglionic fibers to the stellate ganglion and recording the resultant action potential in the inferior cardiac nerve of the cat. When frequency of stimulation does not exceed 40 per second, each preganglionic volley sets up only a single postganglionic volley. But the ganglion introduces temporal dispersion either because of differences in synaptic latency or because of repetitive firing by the individual units. In order to test the theory that postganglionic fibers are stimulated by acetylcholine liberated at preganglionic endings, eserine was injected intravenously. No effects were obtained at low concentrations and only a block of synaptic transmission with high concentrations.—*H. Peak* (Randolph-Macon).

4978. Cannon, W. B., & Rosenblueth, A. A comparative study of sympathin and adrenine. *Amer. J. Physiol.*, 1935, 112, 268-276.—The postulation of two types of sympathin, excitatory and inhibitory, has been contested by Bacq. The authors survey the available knowledge regarding the action of adrenine and sympathin and feel that the postulation of two sympathins is necessary to account for all the different effects produced.—*T. W. Forbes* (N. Y. Psychiatric Institute).

4979. Cole, K. S. Electric excitation in nerve. *Cold Spr. Harb. Sympos. quant. Biol.*, 1933, 1, 131-137.—(*Biol. Abstr.* IX: 9320).

4980. Cowan, S. L. The action of potassium and other ions on the injury potential and action current in *Maia* nerve. *Proc. roy. Soc.*, 1934, 115B, 216-260.—(*Biol. Abstr.* IX: 9321).

4981. Delius, L. Das Verhalten der Nervenchronaxie unter dem Einfluss von Änderungen der Wasserstoffionenkonzentration. (The behavior of nerve chronaxy under the influence of changes of the hydrogen-ion concentration.) *Z. Biol.*, 1934, 95, 27-43.—(*Biol. Abstr.* IX: 9323).

4982. Delius, H., & Hoffman, P. Ueber das Zustandekommen der Hemmungsphase (silent period), die sich an einen Eigenreflex anschliesst. (On recovery from the refractory phase following upon a tendon reflex.) *Z. Biol.*, 1934, 95, 229-234.—(*Biol. Abstr.* IX: 9322).

4983. Dusser de Barenne, J. G. Selektive Abtötung der Nervenzellschichten der Grosshirnrinde. Die Methode der laminären Thermokoagulation der Rinde. (Selective extirpation of the cellular layers of the cerebral cortex. The method of laminary thermocoagulation of the cortex.) *Z. ges. Neurol. Psychiat.*, 1933, 147, 280-290.—The author used the electro-surgical method of thermocoagulation in contact with the cortex. When the cortical surface was heated to a temperature of 60-80° for some seconds, the cells were injured to a depth which varied with the duration of the heat. Two, three, four, five, and six layers of the cortex were reached at will; the functional capacity of the cells not reached by coagulation was unimpaired.—(Courtesy *Année psychol.*)

4984. Gasser, H. S. Axon action potentials in nerve. *Cold Spr. Harb. Sympos. quant. Biol.*, 1933, 1, 138-145.—(*Biol. Abstr.* IX: 9327).

4985. Hazratian, E. A. [The systematicity of activity of the brain hemispheres.] *C. R. Acad. Sci. U.R.S.S.*, 1934, No. 8, 510-514.—Author finds that the systematic activity of the brain hemispheres depends on three doctrines of physiology of the central nervous system: the interrelation of different parts, the conservation of traces of temporary functional changes, and the fixation of these traces.—*A. Yarmolenko* (Leningrad).

4986. Heinrich, W. Note sur les réactions des capillaires pendant l'excitation des centres visuels de l'écorce cérébrale. (Note on the reactions of the capillaries during the excitation of the visual centers of the cerebral cortex.) *Bull. int. Acad. Cracovie*, 1933, 339-345.—(*Biol. Abstr.* IX: 9328).

4987. Hill, A. V. Wave transmission as the basis of nerve activity. *Cold Spr. Harb. Sympos. quant. Biol.*, 1933, 1, 146-151.—(*Biol. Abstr.* IX: 9329).

4988. Hoefler, P. Versuche über Nervenaktionsströme. 4. Ueber die elektrischen Vorgänge bei spontaner, bei sensibler und bei reflektorischer Erregung. (Investigations on nerve action currents. 4. Electrical phenomena in spontaneous, sensory, and reflex excitation.) *Z. Biol.*, 1934, 95, 64-76.—(*Biol. Abstr.* IX: 9332).

4989. Hogg, B. M. Slow impulses from the cutaneous nerves of the frog. *J. Physiol.*, 1935, 84, 250-259.—Nerve fibers which give slow sensory impulses are investigated. The area supplied by the slow fibers is larger than that supplied by the fast fibers, and an appreciable "latent" period exists between the application of the stimulus and the development of a maximum response. The duration of the "latent" period varies with the intensity of the stimulation; the greater the intensity the shorter the period. In the main the slow fibers differ from the fast ones in that they are much more sensitive to thermal and chemical stimuli, less sensitive to the inhibiting effect of KCl, and more sensitive to the action of local anesthetics applied to the skin. The differences in threshold and action of narcotics on slow and fast fibers in the frog skin are in accord with similar observations on pain and touch respectively in man.—*M. A. Rubin* (Clark).

4990. Inglessi, E. Ricerche sull'azione del sistema nervoso vegetativo, sulla colesterinemia e lecitinemia. (Researches on the action of the vegetative nervous system on cholesterinemia and lecithinemia.) *Arch. ital. Pediat. Puericol.*, 1934, 2, 557-568.—The influence of the vegetative nervous system on cholesterinemia and lecithinemia was studied by means of adrenaline, atropine, pilocarpine, coline and ergotamine.—*G. M. Hirsch* (Rome).

4991. Livingston, W. K. The clinical aspects of visceral neurology; with special reference to the surgery of the sympathetic nervous system. Springfield, Ill.: Thomas, 1935. Pp. 258. \$5.00.—*R. R. Willoughby* (Clark).

4992. Magoun, H. W., Hare, W. K., & Ranson, S. W. Electrical stimulation of the interior of the cerebellum in the monkey. *Amer. J. Physiol.*, 1935, 112, 329-339.—The reactivity of cerebellar nuclei and white matter to electrical stimulation was in-

vestigated under nembutal and supplemental ether by means of the Horsley-Clarke apparatus and bipolar, needle-like electrodes. In eight animals stimulation was in a vertical plane through the overlying cerebral hemisphere, while in two animals stimulation was performed in a horizontal plane. Stimulation was performed in such a manner that intact tissue lay always ahead of the point stimulated. The responses obtained involved the eyes, head, limbs and body, and are divided by the investigators into two groups. The responses of Group I were rather diverse, but all concerned with postures of parts of the ipsilateral anterior extremity, while Group II consisted of gross postures of all four limbs rather than specific part movements. Group I responses were short in duration, whereas those in Group II lasted longer. Group I responses were associated with the region of the emboliform and globose nuclei and neighboring white matter, while Group II responses were associated with the fastigial nucleus and neighboring white matter. From this vicinity there were also obtained responses of the eyes, head and axial musculature corresponding to those of the limbs. Both types involved a rebound contraction which appeared at the cessation of stimulation, and it is suggested that this type of response is the normal cerebellar response. Previous findings of a similar rebound characteristic in decerebrate preparations are interpreted as due to the intensification of the normal rebound by decerebrate rigidity.—T. W. Forbes (N. Y. Psychiatric Institute).

4993. Magoun, H. W., & Ranson, S. W. The central path of the light reflex. *Arch. Ophthalm., Chicago*, 1935, 13, 791-811.—This paper reports the results of a series of experiments on cats in whom pretectal lesions had been produced. It was assumed that such lesions must interrupt the pathway of the pupillary light reflex which the authors had traced earlier. Although the mediocaudal portion of the thalamus was also damaged in these animals, it was demonstrated that such lesions alone failed to cause any permanent impairment of the reflex; the only peculiarity was a prolonged constriction of the pupil after removal of the light stimulus. In cats with small pretectal lesions, a marked transitory impairment of the reflex was followed by recovery of about half normal constriction; when the lesion was larger, only a trace of reaction was recovered; in two cats with large bilateral lesions the reflex remained entirely absent during survival—seven weeks. Cervical sympathectomies were performed in several instances, and the then unopposed constriction became augmented when the response had not been entirely lost. Unilateral lesions caused unequal loss of the reflex in the two eyes, the loss being greater in the eye contralateral to the lesion. Miosis was present immediately after the operation and persisted for as long as two weeks, probably due to irritation. Dilatation with a pain stimulus and constriction in response to other stimuli occurred after loss of the light reflex, sometimes in exaggerated degree.—M. R. Stoll (Massachusetts Eye and Ear Infirmary).

4994. Magoun, H. W., & Ranson, S. W. The afferent path of the light reflex. *Arch. Ophthalm.,*

Chicago, 1935, 13, 862-874.—Reviews the literature concerning the path of the pupillary light reflex and traces that path as indicated by the sum of data.—M. R. Stoll (Massachusetts Eye and Ear Infirmary).

4995. Michelazzi, A. M. Ricerche sul polso cerebrale. (Researches on the cerebral pulse.) *Boll. Soc. med.-chir. Catania*, 1933, 1, 58-61.—In a man of 55 presenting a large "cranial breach," the author has studied the cerebral pulse under certain physiological circumstances, such as muscular tension, forced inspiration, carotid and jugular compressions, and also under the action of substances having an intense vasomotor power, viz., adrenalin, histamin, acetylcholin, pituitrin, amyl nitrite, ephetonin, ephedrin, ergotamin, and padutin.—G. M. Hirsch (Rome).

4996. Pines, L. Über Familienähnlichkeit der Hirnfurchen und Windungen. (On familial resemblances of the cerebral sulci and gyri.) *Z. ges. Neurol. Psychiat.*, 1933, 147, 683-695.—This work is a translation of a Russian study. The brains of the two late Bekhterev brothers were studied and compared. Both brains were dolichomorphic and there were no marked differences. However, there was greater asymmetry of the hemispheres in the neurologist, and a greater distance between the frontal pole and the central groove in the two hemispheres in the magistrate.—(Courtesy *Année psychol.*)

4997. Schriever, H. Ueber den Einfluss übergeordneter Zentren auf die Summation im Rückenmark. 2. Ergebnisse bei stückweiser Abtragung des Gehirns sowie partieller Rückenmarks- und Grenzstrangdurchschneidung. (The influence of the higher centers on summation in the cord. 2. Findings in fractional ablation of the cerebrum and in partial transection of the cord and sympathetic cord.) *Z. Biol.*, 1934, 95, 105-115.—(*Biol. Abstr.* IX: 9350).

4998. Suzuke, M. Beiträge zur Kenntnis der elektrotroischen Ströme. I. Normales Verhalten. II. Das Verhalten unter den Narkose. (Contributions to knowledge of the electrotonic current. I. Normal behavior. II. Behavior under narcosis.) *Jap. J. med. Sci.*, 1933, 2, 307-345; 347-423.—(*Biol. Abstr.* IX: 9351).

4999. Wechsler, I. S. A text-book of clinical neurology. (3rd ed.) Philadelphia: Saunders, 1935. Pp. 826. \$7.00.—R. R. Willoughby (Clark).

5000. Wyss, O. A. M. Neuere Ergebnisse der Elektrophysiologie auf dem Gebiet der Nerventätigkeit. (Recent results of electrophysiology in the field of nerve function.) *Schweiz. Arch. Neurol. Psychiat.*, 1935, 35, 128.—A review of the literature.—P. Krieger (Leipzig).

[See also abstracts 5011, 5015, 5046, 5233.]

MOTOR PHENOMENA AND ACTION

5001. Barbara, M., & Vidoni, G. L'Istituto Biotipologico Ortogenetico di Genova. (The Biotypological Orthogenetic Institute in Genoa.) Genoa: Ediz. Badioli, 1935.—A description of this Institute, which is the first one of the sort in Italy and which has been created by Nicola Pende, medical clinician

of the University of Genoa. In this clinic each individual considered "normal" can be thoroughly examined, using the most modern and perfect scientific means, so that any predisposition or tendency toward any illness whatever, and any of the numerous abnormalities or weaknesses that may occur in every organism, psychically as well as physically, can be promptly observed and pointed out to the subject himself, who very often is entirely unaware of his danger. The apparatus of this Institute and the methods of research are also used for a larger study of the somatic and psychic individuality of young people, for their care and hygiene both psychically and physically during their growing period, and moreover to choose rationally the individuals most suitable for each vocation; hence the social and demographic importance of the Institute.—G. M. Hirsch (Rome).

5002. Beritoff, I. [Reflex and behavior.] *Trud. biol. Sekt., Akad. Nauk SSSR, zakavkaz. Filial*, 1934, 1, 77-80.—A reflex is an external reaction of an organ or that of a system of organs evoked through the central nervous system in response to an extrinsic or intrinsic stimulation, its destination being the coordination of the movements both of one organ and of a system of organs. Reflexes may be either innate or acquired (conditioned). Behavior is an integral reaction of the organism which is directed on the one hand to the adaptation of the organism to the external environment and on the other to the alteration of the latter in such a way that owing to this alteration the environment is adapted to the needs of the organism. Every act of behavior is composed of elements which it is customary to consider as reflexes, but all these reflex units are combined into one single act of behavior which is directed by a definite goal. This characteristic of unification constitutes a qualitative difference between a reflex and an item of individual behavior. The science of reflexes and that of behavior are therefore different, and their methods are different. They are interrelated, however, in the sense that it is only through the regularities exhibited in reflex action that we are able to understand the role of reflex elements in behavior and to establish the specific regularities of the central nervous activities of behavior.—R. Smith (Clark).

5003. Beritoff, I. [On the goal gradient of movements in individual behavior.] *Trud. biol. Sekt., Akad. Nauk SSSR, zakavkaz. Filial*, 1934, 1, 80-82.—In the case of an individual behavior, movements are directed toward a certain goal by the imagination of the external environment and of the location of some object important for the animal's life in this environment. In the imagination all familiar ways and obstacles are given. To reach a well-known goal, it is therefore not necessary for the animal to see or smell the goal. The imaginary picture of the external environment marks all necessary direct and round-about ways that lead to the goal, as if the animal could all the time either see this goal or feel it in some way.—R. Smith (Clark).

5004. Boder, D. P. The influence of concomitant activity and fatigue upon certain forms of reciprocal

hand movement and its fundamental components. *Comp. Psychol. Monogr.*, 1935, 11, No. 4. Pp. 121.—

The four components of tapping (movement up, upper reversal, movement down, and bottom reversal) were recorded with an oscillograph. Tapping with index finger or with a tool was studied. The aim was to note the characteristics of these activities under normal conditions and under conditions of concomitant activity (such as choice reaction to light, gripping of a handle, etc.) with the other hand. Between both progressions there is a definite stop which, in finger tapping, lasts from two to four times as long as the progressions. Thus "an act intended and introspectively perceived as consisting entirely or predominantly of motion, in fact represents a situation in which the movement is arrested from seventy to eighty percent of the time, while only twenty to thirty percent is occupied by the displacement of the finger." Concomitant activities in the other hand effect reduced speed, alteration in the pattern of tapping, differences in the duration of arrested movement, and reduction in the tapping excursion. Mere gripping of a bar by the opposite hand increases tapping rate, while movement of the bar decreases it. Use of a tool, rather than changing the tapping rate as such, affected the ratio between reversal time and progression time. Data on variability are presented. The results are interpreted in the light of McDougall's drainage theory and Ukhtomski's principle of the dominant. "It appears that fatigue may reduce the capacity of a pathway for dominance and render it more susceptible to inhibition ('drainage?') by other newly excited action systems." Bibliography of 123 titles. Diagrams of apparatus.—N. L. Munn (Pittsburgh).

5005. Brown, C. W. Subcortical mechanisms in learning: 1. The functional significance of subcortical nuclei in certain simple learning tasks, with a description of a program for further experimental work. *Psychol. Rev.*, 1935, 42, 307-334.—Three different types of experiment have yielded evidence on the functional significance of subcortical nuclei: (1) demonstrations of the capacity for learning in decorticate specimens, (2) experiments in which subcortical nuclei were destroyed and the animal's capacity tested, and (3) experiments primarily directed toward a study of the cerebral cortex, but in which incidental lesions to subcortical nuclei were involved. Studies of each type are reviewed and evaluated. Much further work must be done before the functional significance of subcortical mechanisms for learning is clear. By means of high frequency currents the author has found it possible to destroy the deeper nuclei with a minimal destruction of the overlying cortex. Control over the locus of destruction is accomplished by means of a combination head-holder and goniometer-manipulator. A group of problems was chosen for studying learning, which preliminary tests show to give highly reliable scores. Good results from the improved techniques are predicted.—A. G. Bills (Chicago).

5006. Chiba, T. Der Wille als "Eigenbewusstsein." (Will as one's own consciousness.) *Tohoku*

psychol. Folia, 1935, 2, 129-144.—Such subjects as the essence of will, its peculiarities, and the problem of freedom are reviewed, and will as *Eigenbewusstsein* is treated from Chiba's own standpoint in psychology.—R. Kuroda (Keijo).

5007. Diringshofen, H. v. *Die Wirkung von gradlinigen Beschleunigungen und von Zentrifugalkräften auf den Menschen. Allgemeine Einleitung und physikalische Einführung. I. Die Hämostatik bei Beschleunigungseinwirkung.* (The effect of constant acceleration and of centrifugal force upon human subjects. General introduction and physical orientation. I. Hemostatics and the influence of acceleration.) *Z. Biol.*, 1934, 95, 1-26.—(*Biol. Abstr.* IX: 9293).

5008. Enke, W., & Meerowitsch, B. *Experimentelle Untersuchungen zur Psychomotorik der Konstitutionstypen und ihre Beeinflussung durch exogene Faktoren.* (Experimental researches on the psychomotricity of constitutional types and their capacity to be influenced by exogenous factors.) *Z. ges. Neurol. Psychiat.*, 1933, 147, 194-215.—The authors examined 58 subjects representing the three Kretschmerian types (20 pyknics, 22 leptosomes and 16 athletics). 26 of the subjects were in good health and 32 were ill. They were all asked to perform a test of stability, a construction test, and a sorting test. The pyknics proved less patient, persevering and attentive than the schizothymes. In the performance of tasks the pyknics tended to use both hands, even if this was undesirable; the leptosomes used the hands cooperatively. The pyknics had difficulty in following a model, while the leptosomes succeeded in this easily. In tasks involving sensitiveness the leptosomes used only the fingers, while the pyknics and athletics used the whole hand. Although the pyknics adjusted themselves most quickly and easily, the aptitude for practice was greater in the leptosomes. The athletics were unadapted to tasks involving sensitiveness; they also showed the least interest in drill. All the above characteristics were more marked in the ill than in the well subjects.—(Courtesy *Année psychol.*)

5009. Harris, A. S. *A study in reflexes: identification of the cutaneous afferent fibers which evoke ipsilateral extensor and flexor reflexes.* *Amer. J. Physiol.*, 1935, 112, 231-249.—Cutaneous fibers of the hind leg of the bullfrog evoking ipsilateral flexion and extension were investigated by means of several different techniques. An induction coil and a low resistance potential divider were used for low frequency stimulation, while a Schmitt thyatron stimulator was used for frequencies above 60 cycles. The nerves involved were the posterior, dorsal, medial and lateral (cutaneous). Appropriate section of fibers mediating other responses than those desired was used together with determinations of threshold, measurements of diameter of fibers and examination of conduction rates and configuration of the action potential records. The optimal frequency of stimulation for the ipsilateral extension reflex was about 120, that for the flexion about 60 per second. The thresh-

old for the fibers producing the flexor reflex was 1.6 to 1.7 times that of the fibers producing the extensor reflex at the optimal frequency for each. Similarly the cutaneous nerves evoking ipsilateral extension showed a more rapid conduction rate than those evoking flexion. Both the threshold and the conduction rate of the former correspond to those of the most irritable and most rapidly conducting fibers of the sciatic. In general the nerves evoking the extensor reflex were found to contain large fibers, those evoking flexion small fibers (6 to 10 μ smaller in diameter on the average). Besides the fibers in nerves evoking flexion (some of them correspond in size and conduction rate to pain fibers as determined by Heinbecker and O'Leary) other fibers are also involved, especially near the threshold for the reflex. The extensor center apparently exhibits a lesser degree of inertia as indicated by optimal frequency and latent period. It is suggested that the non-nociceptive part of the ipsilateral flexion response may be postural while the extension may be locomotor. The predominant response for each of the nerves involved is given.—T. W. Forbes (N. Y. Psychiatric Institute).

5010. Hazratian, E. A. [Concerning the action of unconditioned reflexes on conditioned reflexes.] *Bull. Inst. Marx-Leninism, Erivan*, 1933, No. 2, 135-146.—The author states on experimental grounds that the strength of conditioned food reflexes depends on the size of intervals between the end of the unconditioned stimulus and the beginning of the conditioned reflex. The unconditioned food reflexes, on the contrary, are stronger when the interval is shorter. The weakening of conditioned reflexes in connection with the lessening of the interval depends on the inductive inhibition of the centers of conditioned reflexes induced by the irritation of the unconditioned food center.—A. Yarmolenko (Leningrad).

5011. Hazratian, E. A. [The action of the simultaneous intersection of both sympathetic nerves on the conditioned food reflexes in dogs.] *C. R. Acad. Sci. U.R.S.S.*, 1934, No. 9, 578-583.—The fact of the comparatively small change of the conditioned reflex activity of dogs after extirpation of the upper sympathetic neck ganglion shows that the changes of the higher nervous activity of dogs depend on the intactness of the paths for central impulses.—A. Yarmolenko (Leningrad).

5012. Hovland, C. I. *Weight loss changes during muscular work following food ingestion.* *Amer. J. Physiol.*, 1935, 112, 307-309.—Metabolism during work was compared with that in relaxation by the use of the insensible weight loss technique. The time for a 2-gram loss was the practical measure employed. Ten male subjects between 18 and 34 years of age were tested on four days. The first and third days they had a light meal (a ham sandwich and a glass of milk), while on the second and fourth they were fed a heavy meal (three times the above). The ratio of metabolism during work to that in relaxation was greatest at about 4 p.m. and after the heavy meal. It is concluded that maximum inefficiency from the energy standpoint occurs in the late afternoon, about

four hours after eating.—T. W. Forbes (N. Y. Psychiatric Institute).

5013. Johnsson, V. En efterundersökning av en av Sterling beskriven handreflex. (Control observations of a hand reflex described by Sterling.) *Hygiea, Stockh.*, 1935, 97, 401-410.—The writer describes observations since 1931 at the Sahlgrenska Hospital of the hand reflex which Sterling designated in 1926 in *Rev. neurol.* as "le signe de la flexion palmaire des doigts" and which he compares to Rossolimo's toe reflex. Johnsson designates the reflex as "handrossolimo (H-R)."—M. L. Reymert (Mooseheart Laboratory for Child Research).

5014. Katz, D. Some fundamental laws of the psychology of needs: hunger. *Character & Pers.*, 1935, 3, 312-326.—The phenomenon of appetite is interpreted in terms of the author's theory of avidity; i.e., the satisfaction of hunger is an act of "self-steering on the part of the organism, directly resulting from its outward and inward chemical and physical conditions."—M. O. Wilson (Oklahoma).

5015. Kempf, E. J. Physiology of attitude—emergence of ego-organization. *Med. Rec., N. Y.*, 1935, 141, 560-561.—Tonus of somatic muscles in relation to visceromotor impulses is discussed and illustrated by the conditioning effect of increased or decreased cardiac tone in effecting an attitude of buoyancy or discouragement attributable to a state of easy or difficult recoverability from cardiac muscle fatigue. The author believes that similar conditioning of organization of attitude from afferent nerve impulses arises, probably, from all the greater visceral segments. He then cites evidence from the experimental physiological work of Cannon, Carlson, Poulton, and others of the characteristic streams of afferent nerve impulses giving characteristic cravings and emotional feelings or affective tones which are related to characteristic degrees of tension and distension of different visceral segments. The particular experiments cited are those relating to studies of the muscular activity of the stomach and states of distension. A 29-item bibliography is appended.—M. H. Erickson (Eloise Hospital).

5016. Kempf, E. J. Physiology of attitude—emergence of ego-organization. *Med. Rec., N. Y.*, 1935, 142, 15-18.—The author continues his discussion of the experimental evidence for afferent nerve impulses originating from degrees of tension or distension of visceral segments giving rise to affective tones. Bladder distension, bronchial spasms and gastrointestinal changes, among others, are cited to illustrate the relationship between physiological states and the development of affective states and attitudes. Experimental work on the vascular system, particularly the cerebral and meningeal vessels, in relation to pain is cited, and also work on the removal of sympathetic and parasympathetic innervation in relation to emotional behavior, with a general discussion of the results obtained. An 8-item bibliography is appended.—M. H. Erickson (Eloise Hospital).

5017. Metfessel, M., & Hovey, M. Reflexes in the frog. Chicago: Stoelting, 1932. 1 reel, 212 ft.,

16 mm. \$19.70 sale.—Produced by the University of Southern California. Four frogs are tested in a number of experimental situations to demonstrate important factors in reflex action. Frog No. 1 is normal, No. 2 has forebrain removed, No. 3 has forebrain and optic lobes removed, and No. 4 retains only the caudal one-third of the medulla. Part A of the film shows righting reactions of frogs when placed on their backs. Part B shows swimming reactions. Part C shows successively the effects of weak acid on the foot, weak acid on the back (showing directed movement), strong acid on back (showing irradiation) and inhibition of response to acid by simultaneous application of faradic stimulation to opposite foot. This and other films from this laboratory are designed for use with Metfessel's *Student's Guide for Demonstrations of Psychological Experiments*, McGraw-Hill 1932, and Metfessel and Musgrave's *Instructor's Guide for Demonstrations of Psychological Experiments*, McGraw-Hill 1933. All films can be used without the guides, but if used with the guide, students are asked to record very simply their observations on factors demonstrated, using handy record blanks designed for semi-darkened projection rooms. All films have good photographic quality, and the clearly printed titles and directions make them virtually self-explanatory.—R. H. Seashore (Oregon).

5018. Mowrer, O. H. Some neglected factors which influence the duration of post-rotational nystagmus. *Acta Oto-Laryng., Stockh.*, 1935, 22, 1-23.—Pigeons, rabbits and men were used as subjects. Pigeons normally show head nystagmus when rotated, while men show only eye nystagmus. The greatest amount of post-rotational nystagmus was found when the subjects were rotated in the dark and kept in the dark afterwards. The least amount of post-rotational nystagmus was found when the subjects were rotated in a lighted room and kept in the light afterwards. Intermediate amounts were found when the subjects were rotated in the dark and then the light turned on and vice versa. This was explained by (1) the tendency of the subjects to try to fixate some part of the visual environment, (2) the tendency of the visually induced rotational nystagmus to persist after the end of rotation, and in birds (3) the tendency for the head movements involved in the visually induced rotational nystagmus to stimulate the vestibular receptors so as to render the retardation of the subject relatively ineffective as a vestibular stimulus. Bibliography.—M. B. Mitchell (New Hampshire State Hospital).

5019. Ogden, R. M. The Gestalt theory of learning. *Sch. & Soc.*, 1935, 41, 527-533.—"A Gestalt theory of learning posits a completely integrated behavior which can be improved by the elaboration of partial patterns within the whole. These patterns remain under the domination of the whole organism. Any undue dominance of a partial pattern leads to abnormality or perversion. The positivist's view of this process is not only naïve; it also leads to abnormality and perversion of behavior, whenever it leads his pupil to identify operations or facts as independent

units or entities. Radical behaviorism insists that in order to learn any subject, be it linguistic, mathematical, scientific or historical, the pupil must incorporate it in his behavior as something he wants. The satisfaction of his adjustment is the criterion of his achievement. He learns the subject when it belongs to him as one of his ways of behavior."—*H. L. Koch* (Chicago).

5020. Paulsen, G. B. The reliability and consistency of individual differences in motor control. II. *J. appl. Psychol.*, 1935, 19, 166-179.—An analysis of data based on 80 subjects suggests that steadiness is a dynamic function. Practice effects appear with repeated sittings. Measures of steadiness occupying a short time in few sittings give only a fair index of individual ability. "The most important implication of this thesis is the increased emphasis which should be placed upon repeated examinations of individuals at different times rather than the completion of testing procedures within a given examination period." A coefficient of trait variability is proposed based on the test-retest r and odd-even r .—*R. S. Schultz* (Psychological Corporation).

5021. Petersen, H. Untersuchungen über die Eigenreflexe von Kaltblütern. (Investigations on the tendon reflexes of poikilotherms.) *Z. Biol.*, 1934, 95, 173-178.—(*Biol. Abstr.* IX: 9341).

5022. Rockwell, J. G. Physical conditioning factors in learning. *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 17-36.—An essential quality of learning is change or variation in the patterns of behavior potential, which, if effective, results in an economy of tissue function. To the three traditional criteria of learning, time, errors and trials, Pavlov has added another, salivary secretion. Learning is fundamentally expressed in a graphic way by the negatively accelerated curve. We know more about factors conditioning learning than about what takes place in the nervous system. Sensory acuity is important in learning. Effects of diet upon intelligence have generally been negative. Neural injury affects learning. Other conditioning factors are drugs, toxins, vitamins, malnutrition and the glands of internal secretion. "Careful scrutiny of the data dealing with the function of the synapse reveals few facts that warrant the big assumption of the neural track hypothesis."—*P. S. de Q. Cabot* (Harvard).

5023. Rosenblueth, A., & Schwartz, H. G. Reflex responses of the nictitating membrane. *Amer. J. Physiol.*, 1935, 112, 422-429.—Cats were used under ether and urethane. The responses of the right nictitating membrane were recorded isotonicity and blood pressures were recorded from the carotid or femoral artery. Cutaneous, muscular, mixed somatic and visceral afferent nerves were stimulated after being sectioned peripherally. In general higher frequency and higher intensity produced a greater reflex contraction. Tonic contraction was obtained from a cervical sympathetic, central inhibition was obtained, also rebound, and summation was more than linear for small responses. Blood pressure responses and responses of the membrane were sometimes

parallel but often independent. It is pointed out that practically all features of the intrinsic musculature of the nictitating membrane (which is smooth and supplied by sympathetic nerves) are also found in spinal reflexes, the main difference being quantitative and the chief difference being the time course of the response, which is much slower. It is held that the long after-discharge is best explained by assuming chemical mediation at the synapses rather than by assuming continuous neural bombardment. Although the nictitating membrane response usually coincided with various sympathetic responses, such as increased heart rate, adrenaline, dilatation, etc., no erection of hairs was noted and it was possible to separate some of the responses. It is therefore held that probably independent centers, rather than a main sympathetic center, were stimulated.—*T. W. Forbes* (N. Y. Psychiatric Institute).

5024. Rubin, H. H. The glands of life; the story of the mysterious ductless glands, their effects on our mental and physical health, appearance, personality, and behavior. New York: Bellaire, 1935. Pp. 164. \$2.00.—*R. R. Willoughby* (Clark).

5025. Simeone, F. A. The effect of initial tension on the spontaneous activity and responses of the non-pregnant cat's uterus. *Amer. J. Physiol.*, 1935, 112, 320-322.—The question whether or not stretch is the stimulus for "tone" in smooth muscle is investigated by observing its effect on the amplitude of the rhythmic contraction of the cat's uterus. Increased tension caused decreased amplitude and therefore may be considered as evidence against the view that stretch is a stimulus for "tone." The effect on the length of the muscle and relaxations produced by adrenaline are inconclusive.—*T. W. Forbes* (N. Y. Psychiatric Institute).

5026. Snoddy, G. S. Evidence for two opposed processes in mental growth. Lancaster: Science Press, 1935. Pp. 103.—In the mirror-tracing experiment, coordination begins at nearly zero and develops to maturity under laboratory control. In this study subjects were paced in such a way that the errors per unit time were made constant throughout. Various groups were given from one to one hundred trials per day, with various rest intervals between trials. Analysis of learning data educed two processes operating simultaneously but with opposite characteristics. Primary growth appears immediately, is stable, continues across rest intervals, and is a positive function not only of repetitions but of interpolated time. These facts indicate a change from an initial dynamic to an adynamic state with time as the sole frame of reference—a concept heretofore neglected in psychology. Secondary growth is based upon primary, but is unstable, enhanced only by repetitions, and lost during interpolated time. Interference between the two growths accounts for plateaus in general learning curves.—*L. A. Riggs* (Clark).

5027. Takemasa, T. Jōju mondai ni kansuru hitotsu no gakushū jikken. (An experiment on learning with special reference to accomplishment.) *Kyoiku Shinri Kenkyū*, 1935, 10, 25-58.—A toy

called "lucky seven" was used, with which O's were required to construct certain forms, such as a cross, a Y, an M, an octagon, a rectangle or the form of a fish. The processes of accomplishment of a task given were studied from several angles. The author believes that trial-and-error learning and insight learning never exclude each other, and appear often interchangeably; in other words, when a task is easier for O's ability, a solution takes place in terms of insight, but when it is too hard for him trial-and-error learning is adopted. A glimpse of a problem solution makes its appearance most often after trial-and-error processes. It is experienced sometimes intuitively and sometimes non-intuitively.—R. Kuroda (Keijo).

5028. Takemasa, T. *Doryoku to renshū kōka*. (Effort and the effect of practice.) *Kyoiku Shinri Kenkyu*, 1935, 10, 261-297.—The subtitle of the study is "An experimental study on the relation between will to learn and the effect of practice," and its purport is to see how the effect of practice may be modified when intense effort is concentrated upon the work after a certain state of possibly natural practice has been attained, especially when the attitude is shifted from natural to competitive. When the latter is the case, some subjects tend to make a poor record rather than to improve in their performance, but as long as a strong will is evoked in a field of competition, the effect of practice increases in general.—R. Kuroda (Keijo).

5029. Waterman, L. *Frequenties van antagonistische bewegingen bij den mensch*. (Frequencies of antagonistic movements in man.) *Ned. Tijdschr. Geneesk.*, 1935, 79, 1161-1163.—A 25-year-old diamond worker was examined for the maximal frequency (speed of repetition) of several movements of head, limbs and fingers. The differences between this frequency and tapping time are emphasized. As expected, motor stuttering and decreasing frequency occurred. An interesting fact was that when the frequency was greatest (bending-stretching fingers) the superiority of right over left was greatest, and that this difference was least with lowest frequencies (arm, leg).—H. Beaumont (Kentucky).

5030. Wolff, W. *Involuntary self-expression in gait and other movements: an experimental study*. *Character & Pers.*, 1935, 3, 327-344.—The reader is first referred to a preliminary report of this study (see VIII: 1732). The present report shows that identification by gait is possible in a minority of cases; recognition of sex is not always reliable, though women are recognized more nearly correctly than men; self-identification as well as identification of others by gait differs from identification based on other forms of expression; gait is in itself a complete form of expression and seems to characterize a person independently of all other forms; gait is a poor basis for identification but a good one for characterization; subjects are reluctant to judge their own gait objectively, even though they do not recognize themselves.—M. O. Wilson (Oklahoma).

[See also abstracts 4966, 4971, 4978, 4982, 4986, 4993, 4994, 5042, 5115.]

PLANT AND ANIMAL BEHAVIOR

5031. Allee, W. C. *Relatively simple animal aggregations*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 919-946.—"The studies summarized in this chapter . . . emphasize the correctness of the point of view that all social phenomena have the common general foundation in certain of the functions of protoplasm which result in automatic, unconscious cooperation, just as the structures of the different animals are generally thought to come from a common though remote ancestor. This emphasizes the mutually inclusive aspects of social processes rather than their divergences and regards piscine, formicine, avian, and human social psychology as more or less intricate specialized developments of a common mass physiology, just as the digestive processes of fishes, ants, birds, and man are specialized developments from the commonly shared physiology of digestion." Bibliography.—E. Heidbreder (Wellesley).

5032. Alverdes, F. *The behavior of mammalian herds and packs*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 185-203.—The associations found among mammals are described from the standpoint of the various forms of sexual relation characteristic of various species. These relations are promiscuity and eight forms of more lasting mateships: monogamous solitary seasonal mateships, monogamous solitary permanent mateships, monogamous seasonal mateships within a herd, monogamous permanent mateships within a herd, polygynous solitary seasonal mateships, polygynous solitary permanent mateships, polygynous seasonal mateships within a herd, and polygynous permanent mateships within a herd. There is also a discussion of the social behavior and the general attitudes of mammals living in families and in herds. Bibliography.—E. Heidbreder (Wellesley).

5033. Blum, H. F. *L'orientation du copépode "Harpacticus fulvus" sous l'influence de la lumière*. (Orientation of the copepod *Harpacticus fulvus* under the influence of light.) *Arch. int. Physiol.*, 1934, 38, 1-8.—(*Biol. Abstr.* IX: 9285).

5034. Buchanan, R. E. *Population behavior of bacteria*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 3-21.—Population behavior among bacteria is determined by hereditary potentialities, by past experiences and environments, and by the character of the immediate environment. Numerous environmental factors, physical and chemical, influence rates of increase and of decrease of bacterial populations. Environmental factors also determine modifications in cellular morphology, which in turn modify the morphology of the mass of cells as a whole. Likewise, changes in environment may completely change the products of metabolism in a group of cells. Associative action is displayed by bacteria in that they show some of the simplest examples not only of living things working together to mutual advantage, but also of all grades of antagonism and parasitism. The influence of the environment on various characteristic

movements of bacteria has been demonstrated by several studies. Bibliography.—E. Heidbreder (Wellesley).

5035. Clements, F. E. Social origins and processes among plants. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 22-48.—Dynamically considered, social groups are the end result of the forces that produce them. The grouping of organisms involves three basic processes: (1) the action of the habitat or ece upon the organism, (2) the interaction between two or more individuals, (3) the reaction of the group upon the ece. Families, colonies, and communities arise in various ways and exhibit various social relationships. A community may be considered an organism of a new order in which the whole is greater than the sum of its parts and in which there is a logical synthesis of all the organisms of a community into a complex organism of a new category. The chief community functions fall into natural groupings in the growth sequence involved in the development and behavior of the climax or biome. These functions are aggregation, migration and ecesis, cooperation, reaction and coaction, disoperation and competition. Bibliography.—E. Heidbreder (Wellesley).

5036. Colton, H. S. Wood rats and ground squirrels in activity wheels. *J. Mammal.*, 1933, 14, 309-311.—(*Biol. Abstr.* IX: 9289).

5037. Crozier, W. J. On the geotropic orientation of *Helix*. *J. gen. Physiol.*, 1935, 18, 659-667.—With *Helix* negative geotropic behavior may be described by the relation: $(\Delta \sin \Theta) (\Delta \sin \alpha) = -\text{const.}$ Θ is nearly a rectilinear function of $\log \sin \alpha$. The analysis of variability is presented. An interpretation is advanced in terms of equivalence of impressed tensions in the anterior musculature.—C. H. Graham (Clark).

5038. Crozier, W. J. The geotropic response in *Asterina*. *J. gen. Physiol.*, 1935, 18, 729-738.—With *Asterina*, geotropic creeping is such that $\Delta \sin \Theta / \Delta \sin \alpha = \text{const.}$ Tests with directed impressed pulls show that the pull upon the tube feet is of primary consequence in the determination of Θ . Theoretical reasons are given for the expressed relationship.—C. H. Graham (Clark).

5039. Crozier, W. J. On reversal of geotropism in *Asterina*. *J. gen. Physiol.*, 1935, 18, 739-742.—In *Asterina* the direction of orientation may be temporarily reversed by mechanical disturbance. A certain level of strychninization produces the same effect. This reversal must be understood as representing a true reversal of inhibition.—C. H. Graham (Clark).

5040. Crozier, W. J., & Kropp, B. Orientation by opposed beams of light. *J. gen. Physiol.*, 1935, 18, 743-748.—Computations of the effective angular inclination (H) of the photoreceptive surfaces of the two sides in *Calliphora* and *Lucilia* indicate that H declines as illumination decreases. H is greater with the two lights opposed at 180° than it is with the beams at right angles.—C. H. Graham (Clark).

5041. Darby, H. H. Studies in diurnal rhythm No. 1. *Anat. Rec.*, 1933, 55, 154.—(*Biol. Abstr.* IX: 9292).

5042. Dworkin, S. Alimentary motor conditioning and pitch discrimination in dogs. *Amer. J. Physiol.*, 1935, 112, 323-328.—The author has previously reported discrimination by cats of approximately one tone and is here investigating the question whether dogs will show a finer discrimination, as reported by Andreyev, or whether their discrimination will correspond to that of the cat, when tested by the author's lid-lifting technique. Tones of from 40 to 50 db. intensity were used with the "differentiating inhibition" technique. The dogs were first trained to respond positively to one tone and then negatively to a second tone, after which the frequencies were brought gradually together to the limit of discrimination. The results agreed with those of Andreyev in that the dog discriminates about one-third of a tone. Two dogs were used and the stimulus frequency was from 2700 to 2900 cycles. The salivary technique was compared with the motor by means of parallel records. Duration and latency of the salivary were greater and inhibition generally took longer. Also there were more "interval responses" with the salivary technique and at times it occurred without the motor, especially for weak stimuli. It is concluded that in general the end results are similar with the two techniques.—T. W. Forbes (N. Y. Psychiatric Institute).

5043. Frenzel, W., Tuszky, Ö., & Gerlach, A. Nochmals: Die denkenden Hunde von Weimar. (Once more: the thinking dogs of Weimar.) *Umschau*, 1935, 39, 99ff.—In a final controversial article, the authors take a stand against the assertion that animals, in particular the "Weimar dogs" have given evidence of human intelligence. Frenzel demonstrates the inadequacy of the experimental set-up and the typical instances of anthropomorphism; he believes that the animals arrive at their reactions by means of movements of the experimenter unnoticed by (perhaps unnoticeable to) humans. Tuszky points out that animals might well have a mind; the possession of intelligence, however, which could be demonstrated only through its exercise over a period of years, was not proven. Gerlach demands, as proof of the asserted intelligent behavior of animals, the execution by the dog of a complicated command.—J. Deussen (Markkleeberg).

5044. Freytag, M. v. Immer wieder die zählensprechenden Hunde. (Once more the "enumerating" dogs.) *Umschau*, 1934, 38, 1033.—The author, owner of the famous "enumerating" dogs of Weimar, emphasizes that a knowledge of dogs of many years' standing is necessary in judging the phenomena in question. For the rest, a sharp distinction must be made between the mechanical training to obey and intellectual training of the animal to teach him to reveal his own will.—J. Deussen (Markkleeberg).

5045. Friedmann, H. Bird societies. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 142-184.—A bird society is defined as any group of individuals, other than the

members of a pair and their immediate offspring, living on such terms that each influences the others collectively or individually for good or bad for an appreciable length of time. The chief types of aggregation are late summer and autumn roosts, migratory flocks, winter feeding flocks, and breeding colonies or groups. The author describes the social behavior of various species of birds in the different types of aggregation. Bibliography.—E. Heidbreder (Wellesley).

5046. Jacobson, C. F., Wolfe, J. B., & Jackson, T. A. An experimental analysis of the functions of the frontal association areas in primates. *J. nerv. ment. Dis.*, 1935, 82, 1-14.—An experimental analysis of the role of the frontal association areas in mediating complex adaptive behavior has been made, utilizing monkeys and chimpanzees as experimental materials. The subjects were first trained on several behavior tests, instrumentation, problem boxes, discrimination tests, and delayed response. They were then subjected to lesions of the frontal association areas and of other areas of the cerebral cortex, and the ensuing behavior disturbances analyzed. The experiments indicate: (1) After injury to the frontal association areas, those activities which demand integration over a period of time can no longer be effectively carried out. The subject seems unable to remember a single experience for even a few seconds in the face of new incoming sensory data, and temporal patterning of responses fails. (2) The memory defect cannot be regarded as a generalized deterioration of intelligent behavior, but appears to be a specific impairment of recent memory in the face of normal adjustments to other aspects of the test situations. The present evidence suggests that this is a qualitative rather than a quantitative loss. (3) The basic disturbance is also manifest in the affective reactions. An "experimental neurosis" was established by continued training on a problem situation too difficult for the animal to master. After bilateral extirpation of the frontal areas, the animal no longer had "temper tantrums" when it made mistakes, and continued training on difficult problems did not evoke an "experimental neurosis." On the other hand, behavior suggestive of the "Witzelsucht" which characterizes human cases with similar lesions was noted. (4) The defect of recent memory cannot be attributed merely to an extensive injury to the cortex, since lesions to other areas produced minimal, if any, changes; on the contrary, the specificity of the frontal areas for mediating this function is indicated. The experiments are discussed in relation to observations on frontal lobectomy in man.—C. R. Atwell (Boston Psychopathic Hospital).

5047. Koch, A. M. The limits of learning ability in cebus monkeys. *Genet. Psychol. Monogr.*, 1935, 17, 164-234.—This study is a part of a larger project on the limits of learning in mammals which has been under way for some years in the Columbia University laboratory. A large model of the Jenkins problem box was used with six male cebus monkeys for a period of over a year. The aim was to determine the limits of learning in the cebus monkey under the same conditions as those used by Fjeld in testing the rhesus

type. The most logical interpretation of the results, Koch says, "would seem to be that no clear difference had been shown to exist between the two types of monkeys in terms of limits of learning." The reactions of the cebus do seem less nervous and somewhat more deliberate than those of the rhesus. The monkeys, as judged by performance with the Jenkins problem box, are markedly superior to such mammals as kittens, white rats, and guinea-pigs. The various steps of the problem presented in this apparatus were found not to progress by equal differences in difficulty. A bibliography of 27 titles is appended.—F. M. Teagarden (Pittsburgh).

5048. Lorenz, K. Der Kumpan in der Umwelt des Vogels. Der Artgenosse als auslösendes Moment sozialer Verhaltensweisen. (The companion in the bird's world. The fellow-member of the species as releasing factor of social behavior.) *J. Orn., Lpz.*, 1935, 83, 137-213.—Using newly coined terms which avoid the use of expressions connected with human emotions, there is a discussion of the role of the parent-"kumpan" in a large group of non-domesticated, but tame, birds of many species. Domesticated birds were not used because they have lost some of their instincts. Animals react to one stimulus from an object; instinctive behavior, directed towards an object, is released through a very small choice of the stimuli coming from that object. The characters that bring forth definite instinctive responses are called "releasers" (*Auslöser*). The "imprinting" of the parent-kumpan takes place at a very definite period of life; the more undeveloped the baby bird is at hatching the simpler is the inborn pattern of the parent-kumpan. The species and age of the baby bird determine whether or not man may be adopted as a parent. A forthcoming article will treat of the child-kumpan, sex-kumpan, social-kumpan, and the brother- and sister-kumpan.—R. Goldman (Clark).

5049. Masure, R. H., & Allee, W. C. The social order in flocks of the common chicken and the pigeon. *Auk*, 1934, 51, 306-327.—In general the work of Schjelderup-Ebbe on chickens is supported, but the principle of fixed dominance is not clear among pigeons. "A social order exists in all the sex-segregated flocks studied. These included Brown Leghorn pullets, Brown Leghorn cockerels, female pigeons and male pigeons. The social organization of the cockerels was more complex and was not as definitely organized as was that of the pullets of the same strain and age. When pigeons were allowed to mate, the resulting picture was of a flock composed mainly of couples, each couple with but few contacts with other couples. The majority of the pecking in such a flock was done by two unmated females. The social order among male and female pigeons was based on peck-dominance worked out after many contacts rather than upon an initial combat with one member of any given contact-pair regularly dominant thereafter. The latter relationship is characteristic for chickens."—W. S. Hunter (Clark).

5050. Masure, R. H., & Allee, W. C. Flock organization of the shell parakeet *Melopsittacus*

undulatus Shaw. *Ecology*, 1934, 15, 388-398.—"These observations of the social organization in small laboratory flocks of shell parakeets demonstrate, as did our earlier work with pigeons, that Schjelderup-Ebbe's generalization that despotic relations exist between individuals of flocks of all sorts of birds such that one is always dominant and the other always subservient does not hold. With few exceptions, in any given contact pair of parakeets of the same sex, now one and now the other dominates the chance contacts; in the long run, the same individual usually wins the majority of the combats." "There is no significant correlation between the peck-dominance order and scores made in learning to run a simple maze."—W. S. Hunter (Clark).

5051. Müller, M. Und die Tiere denken doch. (Animals do think.) *Umschau*, 1934, 38, 1034-1035.—In accordance with his well-known report in the *Münchener Tierärztlichen Wochenschrift* the author attacks the theories of "tid-bit fluid" (*Leckerbissenfluidum*), "occultism," "unnoticed signals," "auto-suggestion," and "self-deception" put forth to explain the enumerating powers of animals. He maintains that the cerebrum of animals can be developed to a type of thinking similar to that of humans, to such an extent that the animal in question can reveal to humans in numeral form the thought-content of his cerebrum. The meaningful responses of the animals signify that the animals are answering with comprehension and are therefore thinking.—J. Deussen (Markkleeberg).

5052. Oehring, W. Die Helligkeitsreaktionen der Chironomuslarve. (The brightness reaction of *Chironomus* larvae.) *Zool. Jb.*, 1934, 53, 343-366.—(*Biol. Abstr.* IX: 9300).

5053. Onoda, K. On the orientation of the regular sea-urchin *Heliocidaris crassispina*. *Jap. J. Zool.*, 1933, 5, 159-164.—(*Biol. Abstr.* IX: 9301).

5054. Plath, O. E. Insect societies. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 83-137.—The social behavior of insects is described in the so-called solitary species, some of which show gregariousness by occasional swarming; in the subsocial species, which are characterized by the care of the young during larval development; and in the social species, such as the social wasps, the social bees, the ants and the termites. The social habits of various species are discussed with reference to specialization of function, division of labor, nest building, care of the young, warfare, slave making, and the provision of food. Various relations between the social insects and their inquilines are discussed and there is a section on social parasitism. Bibliography.—E. Heidbreder (Wellesley).

5055. Pressler, E. Denkende und Zahlensprechende Tiere? Kritische Betrachtungen auf Grund eigener Beobachtungen. (Animals that think and enumerate? Critical reflections on the basis of personal observations.) *Umschau*, 1934, 38, 1036-1037.—It is noticeable that it is not simply that the higher animals start to "speak," but only horses or dogs, i.e. animals that have been domesticated for

thousands of years. The author found, in his control, that a third of the answers of the animals in the experiments might be evoked by involuntary movements on the part of the trainers; another third, however, must have arisen from independent impulses of the animals themselves, while the result of the remaining third of the experiments was questionable.—J. Deussen (Markkleeberg).

5056. Pupilli, G., & Pisu, G. Cronassimetria di muscoli scheletrici di "Discoglossus sardus" Tsch. (Chronaximetry of the skeletal muscles of *Discoglossus sardus* Tsch.) *Boll. Soc. ital. Biol. sper.*, 1935, 10, 85-86.—The establishment of differences between the chronaxies of various skeleton muscles of *Discoglossus* is described. The authors point out, moreover, that the muscles of *Discoglossus* are much more slowly excitable than the corresponding muscles in a frog (*R. temporaria*, as well as *R. esculenta*).—G. M. Hirsch (Rome).

5057. Rubin, M. A. Thermal reception in fishes. *J. gen. Physiol.*, 1935, 18, 643-647.—The reactions of catfish, sunfish, perch and mummichog indicate that certain receptors supplied by the lateral-line nerve are concerned with thermal reception.—C. H. Graham (Clark).

5058. Schjelderup-Ebbe, T. Social behavior of birds. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 947-972.—The author maintains that every bird is a personality in that it is absolutely distinct in character and in the manifestations of character from any other bird of its species. He has observed that there exists among birds a definite order of precedence or social distinction, founded on certain conditions of despotism. He describes these conditions and also discusses other factors which determine the development of social life among birds. Bibliography.—E. Heidbreder (Wellesley).

5059. Smith, D. C., & Smith, M. T. Observations on the erythrophores of *Scorpaena ustulata*. *Biol. Bull. Wood's Hole*, 1934, 67, 45-58.—Persistent expansion follows denervation of the erythrophores by section of the sympathetic cord at various levels. Faradic stimulation of the anterior end of the medulla, however, leads to an immediate and pronounced contraction of the erythrophores, except those previously denervated. These facts are evidence of nervous control for the erythrophores of *S. ustulata*.—(*Biol. Abstr.* IX: 9306).

5060. Wolf, E., & Zerrahn-Wolf, G. The effect of light intensity, area and flicker frequency on the visual reactions of the honey bee. *J. gen. Physiol.*, 1935, 18, 853-863.—For the bee, the stimulating effect of two illuminated fields is equal when the products of area and intensity are equal. The effect of two areas differing in size and flicker frequency is equal when the product of area and flicker frequency is equal for both fields. When two visual patterns vary in coarseness, a 1:1 ratio of choices is obtained when both patterns stimulate equal numbers of retinal elements.—C. H. Graham (Clark).

5061. Wolf, E., & Zerrahn-Wolf, G. The validity of Talbot's law for the eye of the honey bee. *J. gen. Physiol.*, 1935, 18, 865-868.—Equal numbers of bees travel to two fields, one of which is flickering and the other stationary, when conditions of illumination are as dictated by Talbot's law.—C. H. Graham (Clark).

5062. Yerkes, R. M., & Yerkes, A. W. Social behavior in infrahuman primates. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 973-1033.—"It seemed to us more profitable, in view of the paucity and uncertainty of information about the social behavior of infrahuman primates, to try to write constructively, with attention focussed on trend, promise, and possibility of inquiry and discovery, than to survey, digest, and summarize the relevant literature." The authors write particularly concerning lemurs, howlers, baboons, and chimpanzees, types which range from approximately the least to the most manlike of the infrahuman primates. The following topics are treated: (1) associations (i.e. conjugal pairs, families, clans, bands, herds) as organizations and institutions; (2) socialization: the nature and degree of sociability; (3) social service; (4) primate sociology. As a summary and supplement there is a discussion of some of the socially significant differences between monkeys, apes, and men. Bibliography.—E. Heidebreder (Wellesley).

5063. Zoond, A., & Eyre, J. Studies in reptilian colour response. I. The bionomics and physiology of the pigmentary activity of the chameleon. *Philos. Trans.*, 1934, 223B, 27-55.—(*Biol. Abstr.* IX: 9312). [See also abstracts 4909, 4980, 4992, 5011, 5017, 5021, 5023, 5099.]

EVOLUTION AND HEREDITY

5064. Becker, M. Wert der Graphologie für charakterologische Ahnenforschung. (The value of graphology for the characterological investigation of ancestry.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 30-35.—It is difficult to determine graphologically the characterological relation between persons with identical ancestry because of the influence of mixture of races, organic disorders, cultural influences, etc., upon the hereditary disposition, which is the basis of character. In studies of this kind one should determine only what essential qualities are transmitted by heredity in each individual case and what qualities result from the mixture of the different essential traits of the ancestors. The son of a mentally alert father and a mother of low intellectual ability and feeble instinctual drive will show traits in his handwriting of which a part will be found in the handwriting of the father and another part in that of the mother. An example extending over three generations is given.—P. Klimpel (Leipzig).

5065. Becker, W. H. Über die Lebensalter der Eltern bei der Geburt des Genies und den Wert der Erstgeburt. (On the age of parents at the birth of a genius and on the value of primiparity.) *Z. ges. Neurol. Psychiat.*, 1933, 148, 808-813.—Of 109

geniuses, 56% were first born, 17½% second born, 12½% third, 14½% fourth to eighteenth. Only rarely did a mother over 30 give birth to a first-born genius. She sometimes gave birth to a second, third or tenth child who proved later to be a genius; this probability diminished if she was over 40 or under 20. The fathers were between 25 and 36 in 50% of the cases; very few were over 50.—(Courtesy *Année psychol.*)

5066. Bienenfeld, E. Edvard Grieg und seine Vorfahren. (Edvard Grieg and his ancestors.) *Arch. Rass.- u. Ges Biol.*, 1935, 28, 409-413.—A study of Grieg's life from the hereditary-biological standpoint. Heroic deeds and strong will ran recessively through the mother's family (which contained several talented women), and culminated in the outwardly weak and feminine Edvard as psychic acuity and "possession." He produced his finest works between his twenty-third and fortieth years. Finally, progressive tuberculosis crippled the productiveness of a man tormented by an irrepressible unrest.—P. Krieger (Leipzig).

5067. Essen-Möller, E. Untersuchungen über die Fruchtbarkeit gewisser Gruppen von Geisteskranken. (Investigations concerning the fertility of certain groups of mental patients.) *Acta psychiat., Kbh.*, 1935, Suppl. 8. Pp. 314.—The writer concerns himself particularly with the fertility and allied characteristics of schizophrenics, manic-depressives, and epileptics. He points out that this investigation has a dual significance, viz., socio-eugenic and clinical. A critical review of the past work in this field is presented as well as the writer's present investigation. Among topics treated are: death rates in each group, child mortality rate, stillbirths, and fertility data for each group prior to and following hospitalization. Extensive bibliography.—H. A. Cohn (Mooseheart Laboratory for Child Research).

5068. Jaensch, W. Konstitution, Entwicklung und Erbfaktoren. (Constitution, development and hereditary factors.) *Forsch. Fortschr. dtsch. Wiss.*, 1935, 11, No. 6, 75-76.—With any common microscope, the form of the capillaries can be easily observed on the living organism, at the nail-fold of the finger. The characteristic form of the capillary of the infant (transverse rows instead of the vertical hairpin form which appears later) is found in older individuals, above the average among certain psychopaths, in individuals with retarded motor development, but also in certain instances among the highly intelligent. As this infantile capillary constitution can be influenced by administration of a hormone, Jaensch indicates the possibility of prophylactic treatment where necessary. At the same time he believes it possible, with skin-capillary microscopic research, to reveal in living organisms recessive minus-factors in the heredity.—J. Deussen (Markkleeberg).

5069. Miguel, C. Schreibdruck bei Zwillingen. (Writing pressure in twins.) *Z. ges. Neurol. Psychiat.*, 1935, 152, 19-24.—The writer studied the writing pressure of 29 pairs of identical twins and 21 pairs of non-identical twins. With the exception of 6 pairs of non-identical twins of opposite sex, the

members of each pair had studied in the same schools. The ages of the subjects varied between 14 and 30. Writing pressures were recorded kymographically. Identical twins resembled each other much more closely, both in mean writing pressure and in form of the pressure curve, than did the non-identical twins. "Great similarity" was noted in 16 cases among the identical twins and in only two cases among the non-identical. School instruction in writing and professional occupations do not account for the results. The movements and tonus of the muscles playing a part in writing are subject to hereditary disposition.—C. W. Fox (Rochester).

5070. Muller, H. J. Human genetics in Russia. *J. Hered.*, 1935, 26, 193-196.—A review of Vol. 3 of the Proceedings of the Medico-Genetical Institute of Moscow (Russian with English summaries) covering the research of the past two years on heredity and the relation between heredity and environment in man. More than fifty professional psychologists and physicians, genetically trained and cooperating with genetic specialists, have amassed data on several hundred pedigrees. The great majority of human hereditary defects are dominants of irregular expression. Recessiveness of human abnormalities is not as prevalent as generally believed. This offers promise of recognizing "carriers," with attendant significance for preventive therapy. New twin-difference formulae have been devised by Ignatiev. Over 800 pairs of twins were studied experimentally. Groups of twins, living at the Institute, were subjected to intensive differential treatment and teaching methods. This kind of control reveals not only genetic differences between one pair and another, but casts much light on training per se. Copying a pattern from a visible model (in block construction) falls far short of results obtained with the model covered, in producing creative imagination in children. The latter procedure not only raised the "geometrical intelligence" of the subjects but resulted in more lasting effects. Heredity and environment vary with age, with genetic and environmental conditions, and for different traits. Improvement in economic conditions in the Soviet Union should result in a shift of significance for heredity and environment with respect to given characteristics.—G. C. Schwesinger (American Museum of Natural History).

5071. Rüdin, E. Vorhersage erbkranker und normaler Kinder. (Prognosis in regard to normal and hereditarily burdened children.) *Volk u. Rasse*, 1935, 105.—The probability of mental disease is 10-60 times greater among the children of non-gifted parents having mental disease than among the general population. New modes of progress are achieved by the collection and comparative study of "parent groups" whose hereditary potentiality is decreased in the same manner.—P. Krieger (Leipzig). [See also abstracts 4948, 4996, 5113, 5132, 5182, 5341.]

SPECIAL MENTAL CONDITIONS

5072. Adrianova-Perete, V. Simvolika snovideniy Freyda v svete russkikh zagadok. (Freud's dream

symbolism in the light of Russian riddles.) *Akad. Nauk XLV N. Ya. Marru*, 1935, 497-505.—The sexual element plays, as it does in Freud's dream symbolism, an important part in Russian popular riddles. The following symbols of male and female occur: finger and ring, pen in inkwell, hook and eye, key and lock, broom and oven, plow (or seed) and earth, etc. This symbolism suggests that cooperation of psychoanalysts and folk-lorists might be very fruitful.—E. Kagarov (Leningrad).

5073. [Anon.] Officers and council for 1935. List of members and associates. Index to Vol. XLII. *Proc. Soc. psych. Res., Lond.*, 1935, 42, 319-342.—J. B. Rhine (Duke).

5074. Bálint, M. Das Endziel der psychoanalytischen Behandlung. (The final goal of psychoanalytic treatment.) *Int. Z. Psychoanal.*, 1935, 21, 36-45.—Mental illness results from environmental stresses in childhood. The goal of analytic therapy is to reveal this unconscious basis of the illness and to prepare the patient for normal love relationships on a new basis. The latter aspect of the goal is often not sufficiently emphasized.—S. Rosenzweig (Worcester State Hospital).

5075. Bastedo, W. A. What the physician should know about tobacco. *Med. Rec., N. Y.*, 1935, 141, 553-555.—The author completes his discussion of the effects of tobacco on the vascular system, discussing particularly its indefinite relationship to coronary arteriosclerosis and angina pectoris, and its apparently definite relationship to thromboangiitis obliterans. He then summarizes its other effects and discusses briefly the tobacco habit as such and the reasons for smoking, and concludes that "It would seem unthinkable that tobacco is universally harmful."—M. H. Erickson (Eloise Hospital).

5076. Baudouin, C. Esquisse d'une pathologie du risque. (Outline of a pathology of risk.) *Zbl. Psychother.*, 1935, 8, 108-113.—Characteristic of the exaggerated desire for security is its action in conjunction with other tendencies, particularly the retreat and mutilation complexes. The risk most dreaded is comparison. Every decision, with the consequent risk inseparable from action, involves possible mutilation, with, curiously, the underlying fear of cutting. The association may be: (1) the cutting at birth; (2) the search for the absolute, i.e. integrity, the relative signifying mutilation; (3) the refusal to make certain differentiations—genital, anal, to cut loose from the group, etc.; (4) the fact that different decisions are equally present in consciousness and all seem equally possible. In the unconscious, decision (a word eloquent literally) is symbolized by propitiatory sacrifice, a voluntary giving up of one part to save the rest. In modern man, however, detached from religion, the combined instincts of action and risk have lost their meaning and manifest themselves in the most regressive, brutal and foolish forms—frenzied sports, the thirst for catastrophes, the obsession of war. Regression of the risk-security system results in all-or-nothing: abulia or rush into catastrophe.—M. E. Morse (Baltimore).

5077. Behn-Eschenburg, H. The antecedents of the Oedipus complex. *Int. J. Psycho-Anal.*, 1935, 16, 175-185.—Two problems are considered: (1) the time limits of the Oedipus complex, and (2) the importance of the pre-Oedipal phase, since recent findings in analysis of children and female patients indicate that the original setting of the zenith of the Oedipus complex in the fourth or fifth year is much too late. The author discusses these questions in the light of material taken from a diary kept by the mother of a small girl. Items discussed are the child's marked penis envy at the age of 17 months, the course and development of her jealousy toward a small boy during the next few months, and the expression of a desire to take her mother's place in bed at the age of 2½ years. Each manifestation of the child is discussed in its psychoanalytical implications, and the author concludes that the Oedipus complex may occur very early even when there is no apparent evidence; indeed, the "less sign there is to be seen of any Oedipus complex, the earlier it will have played its part."—M. H. Erickson (Eloise Hospital).

5078. Bergler, E. An enquiry into the 'material phenomenon.' *Int. J. Psycho-Anal.*, 1935, 16, 203-218.—The author criticizes Silberer's concepts of "autosymbolic phenomena" as erroneous in the light of the studies made by Jones, whom he quotes at length in support of his criticisms. The author then discusses the second member of Silberer's triad, "functional, material and somatic phenomena," expressing the view that Silberer's observations are correct but his interpretations are not. The author then raises the problem of the frequent experience, when falling asleep, of having the stream of thought suddenly interrupted by the interpolation of a transient pictorial representation. Five examples of such autosymbolic phenomena taken from the case histories of his patients are given in detail, together with analyses of the phenomena. In each instance the occurrence was shown to be related to unconscious id wishes and unconscious reproaches of the super-ego. By means of this autosymbolic phenomenon the patient's ego freed itself from the interruptions of sleep occasioned by the id wish and the super-ego reproach. He concludes with the statement that the "material phenomenon" is found to be an equivalent of the anxiety dream and the affect of terror.—M. H. Erickson (Eloise Hospital).

5079. Bibring-Lehner, G. Zum Thema des Übertragungswiderstandes. (On the theme of transference-resistance.) *Int. Z. Psychoanal.*, 1935, 21, 55-61.—Every experienced analyst has encountered cases in which slight therapeutic success could be achieved but where this result could not be attributed to the severity of the illness itself. The peculiar personality or sex of the analyst, as part of the patient's present reality, may in such cases be the cause of the difficulty, as appears when the patient, for one reason or another, changes analysts. Two cases illustrating the mechanisms involved are discussed and the suggestion is made that a change of analysts be recognized as a regular therapeutic pro-

cedure in such cases, and that the choice of the new analyst be made by the old one with the peculiar problems of the patient, as already disclosed, in mind.—S. Rosenzweig (Worcester State Hospital).

5080. Bonaparte, M. Passivität, Masochismus und Weiblichkeit. (Passivity, masochism and femininity.) *Int. Z. Psychoanal.*, 1935, 21, 23-29.—The pains and pleasures of woman's sexual life are compared with those of man, especially as related to the child's sadistic interpretation of coitus. The necessity for differentiating between masochism—an abnormal attitude—and passivity—a normal one—in the sexual experience of the female is brought out.—S. Rosenzweig (Worcester State Hospital).

5081. Burling, T. The value of explicit acknowledgement of the transference. *Amer. J. Orthopsychiat.*, 1934, 4, 518-523.—While it is no longer necessary to argue that the social worker should be consciously aware of the impact of her personality on those with whom she deals, it is in certain cases very valuable for the client to be aware of the implications of this relationship and to discuss it freely. Failure in this respect often results in a sudden antagonism which makes a successful readjustment process impossible. Wisely used, this dependency is not a bond which is used to compel the client to behave as the social worker thinks best, but one which it is her privilege to help him outgrow.—H. Beaumont (Kentucky).

5082. Cheney, C. O., & Landis, C. A program for the determination of the therapeutic effectiveness of the psychoanalytic method. *Amer. J. Psychiat.*, 1935, 91, 1161-1165.—It is suggested that two groups of mental patients, matched for age, intelligence, etc., be studied, one with and one without psychoanalytic treatment, in order to evaluate the contributions of psychoanalysis.—R. Goldman (Clark).

5083. De Laszlo, V. Versuch einer Traumdeutung auf Grundlage der analytischen Psychologie. (An attempt at dream interpretation based on analytical psychology.) *Zbl. Psychother.*, 1935, 8, 119-132.—An exhaustive discussion of a dream in the light of the collective unconscious. The theme was the initiation into the second half of life, after the Eros principle had attained fulfilment; i.e. the death of a personal and the birth of a supra-personal life. This is the beginning of individuation, or, as rebirth in the spirit is designated, religious experience.—M. E. Morse (Baltimore).

5084. Dietz, P. A. Over droomen van levensschouw. (Dreams as a review of life.) *Ned. Tijdschr. Psychol.*, 1935, 3, 136-154.—Protest is, in the opinion of this author, a much more frequent factor in dreams than is wish-fulfilment. When directed toward tendencies and wishes of the dreamer, this protest may develop into self-criticism. This is what Jung has called a compensatory function of the dream. In this way dreams may often serve as a warning. Several dreams are given and interpretations submitted which support the author's thesis that especially during critical periods in life the individual tends to review in dreams his past life in a slightly melancholy-

manner. Such dreams may take the form of wishes, protests, criticism, etc., but are more general in their content. They occur only once or very few times in each individual life, and much more frequently among men.—*H. Beaumont* (Kentucky).

5085. **Düick, J.** *Hypnotische Schriftexperimente.* (Hypnotic experiments on handwriting.) In: *Kreusch, Praktische Graphologie für das tägliche Leben.* Berlin: 1935. Pp. 24-29.—Experience shows that most people have only a very small repertoire of expressive movements in general, and especially for written expression. Only in persons with a great ability of adaptation, in those with a capacity for profound empathy—as we find it in actors—can an unusually broad variation be found. This is true especially when a frequent misspelling leads to the conclusion that there are affective processes going on in the unconscious. On these observations the following experiment was based: A hypnotized subject received the order to write signatures. He wrote signatures (mostly of persons of his acquaintance) each of which characterized very well profession and milieu. This result necessitates the greatest caution on the part of the expert in handwriting with regard to persons of affectively toned temper.—*P. Klimpel* (Leipzig).

5086. **Fenichel, O.** *Zur Theorie der psychoanalytischen Technik.* (On the theory of psychoanalytic technique.) *Int. Z. Psychoanal.*, 1935, 21, 78-95.—This is a critical discussion, from the strictly Freudian standpoint, of papers by Reik, Reich and Kaiser on analytic technique.—*S. Rosenzweig* (Worcester State Hospital).

5087. **Forsgren, E.** *Über die Rhythmik der Leberfunktion, des Stoffwechsels, und des Schlafes.* (Concerning the rhythmic function of the liver, metabolism, and sleep.) *Svenska Läkaresällsk. Handl.*, 1935, 61, 1-56.—A few clinical cases are presented. The observation that the assimilating activity phase of the liver appears to fall mostly during the night could give rise to the supposition that the functioning of the liver is subordinate to sleep. A closer examination of the curves, however, will reveal that all of them begin to fall in the afternoon, before sleep begins, and that they reach a minimum during the night but begin to rise while the subject is still sleeping. Liver functions and metabolism, then, might not be subordinate to sleep but coordinate. "It might serve as a genetic explanation of the midday fatigue that the diuresis at this time has reached its maximum." When water extracts from the liver of sleeping rabbits were injected into awake, active rabbits, "a high-grade hypnotic effect was observed."—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5088. **Freud, S.** *Der Familienroman der Neurotiker.* (Family fantasies of neurotics.) *Z. psychoanal. Pädag.*, 1934, 8, 281-285.—One of the most essential and most painful adjustments in the individual's development is his breaking away from parental authority. Society's progress depends on this step, and failure in this respect is characteristic of a type of neurotics. To the small child his parents

constitute the sole authority and the source of all his faith. His most intense desire is to grow up exactly like them. Later he begins to compare them to other parents, finding fault with his own—a situation frequently caused by sexual rivalry. Just before puberty this critical attitude is followed by an imaginative attempt to replace the real parents by others, usually socially superior. When the child becomes aware of the facts of procreation, he accepts his mother, but imagines himself the product of her union with a more perfect father. Thus the previous asexual fantasies gain sexual significance. The youngest child is especially apt in this manner to disclaim blood relationship with siblings. These products of the imagination appear to revert to the previous happy stage when the child thought his parents perfect. Dreams of normal adults, in which exalted personages represent the parents, show the same trend.—*H. Beaumont* (Kentucky).

5089. **Freud, S.** *Psycho-Analysis.* (Psychoanalysis.) *Z. psychoanal. Pädag.*, 1935, 9, 73-80.—This is a German translation of Freud's article "Psychoanalysis: Freudian School" in the 13th edition of the *Encyclopaedia Britannica* (1926). After a brief historical introduction he divides the content of psychoanalysis into (1) a special method of treating neuroses, and (2) the science of unconscious mental events. The latter considers mental life from three viewpoints: dynamic (based on drives, represented by affective concepts), economic (regulation of mental events by the principles of pleasure and displeasure), and topical (division of the mental apparatus into id, ego and super-ego). These considerations, it is emphasized, are open to revision. The analytic concept of neuroses rests on three pillars: repression, the importance of sex drives, and transference. The therapeutic procedure, by no means the most important phase of the system, substitutes conscious for unconscious mental activities. It has been found most fruitful in cases of milder neuroses, hysteria, phobias, compulsion neuroses, distortions of character, sexual repressions and abnormalities, and sometimes effective in severe depressions; its influence on dementia praecox and paranoia is questionable. A brief history of psychoanalysis since its conception and a short bibliography are appended.—*H. Beaumont* (Kentucky).

5090. **Hermann, I.** *The use of the term 'active' in the definition of masculinity. A critical study.* *Int. J. Psycho-Anal.*, 1935, 16, 219-222.—The tendency to correlate the word "masculinity" with "activity" is discussed, the author expressing the belief that such correlation is erroneous because of the following considerations: (1) libido, defined as energy of sexual instincts, must be either sexually neutral, male, or female; (2) the terms "active" and "passive" are general concepts without clearly defined content, and are relative in meaning; (3) female passivity is biologically a form of activity; (4) in coitus "active penetration—passive reception" is a false antithesis, the reality being an active desire to penetrate and an active desire to receive; (5) aggression is a tendency

exhibited by both sexes. The author emphasizes the need of clear definitions of these terms as an aid to proper therapeutic understanding.—*M. H. Erickson* (Eloise Hospital).

5091. **Hitschmann, E.** *Der Vater als Eindringling.* (The father as intruder.) *Z. psychoanal. Pädag.*, 1935, 9, 106-112.—Four examples are given of extreme Oedipus complexes, occurring at the usual age (between 4 and 6). In each case, the boy had lived alone with his mother and considered the father, when he moved in with them, an intruder (in two cases the father had been to war, in one he married the mother when their child was four years old, and in the fourth the parents had been separated for economic reasons). The subsequent feelings of deep hatred, extreme jealousy, death-wishes and feelings of guilt and fear were so pronounced as to lead to distinct modifications of personality and even neuroses.—*H. Beaumont* (Kentucky).

5092. **Horney, K.** *The problem of feminine masochism.* *Psychoanal. Rev.*, 1935, 22, 241-257.—Feminine masochistic phenomena are very important in our western culture. The author does not believe in the physio-psychic shock theories of Deutsch and Rado; she feels that masochism cannot be exclusively related to factors inherent in the anatomical-physiological-psychic characteristics of woman, but is conditioned by the social organization in which the particular woman has developed. Ethnological data should be collected, but it should be remembered that there are several psychoanalytical features suggesting sources in regard to such studies. The author points out trends to be found in psychoanalytical patients with masochistic tendencies, such as attempts to find means of reassurance. She feels that it is necessary to make anthropological studies using valid psychoanalytical criteria to determine the amount of weight to be placed on cultural factors before real understanding can be reached.—*L. S. Selling* (Wayne).

5093. **Laird, D. A.** *Types of sleepers: normal and abnormal.* *Med. Rec.*, N. Y., 1935, 142, 13-15.—The author summarizes the article as follows: "An analysis of the movements from hour to hour of fourteen sleepers over a period averaging more than a month for each shows evident individual differences. A gradual increase in movements from hour to hour through the night, which is termed crescendo sleep, is suggested as being the normal sleep form. Variation from this crescendo sleep curve which is produced by illness, susceptibility to illness or gastric distress, may offer a basis for searching out hitherto unsuspected constitutional weaknesses or undesirable habit patterns of individuals. A remarkable similarity in the sleep curves of pairs of brothers and sisters is also noted."—*M. H. Erickson* (Eloise Hospital).

5094. **Lang, J. B.** *Kasuistischer Beitrag zur Schlangensymbolik.* (A contribution to the discussion of the serpent symbol.) *Zbl. Psychother.*, 1935, 8, 113-119.—In connection with mythology and analytical material, Lang discusses the serpent as the symbol of: (1) the eternal renewal of life (shedding skin), (2) rebirth of the hero (being swallowed by the

serpent); (3) the spiritual transformation from the "natural" to the religious and creative unconscious, as exemplified in the Asiatic mystery religions and primitive Christianity. In the Garden of Eden the serpent is the exponent of the dynamic-pessimistic as opposed to the optimistic-static view of life. The shame of nakedness signifies disturbance in the biological stream of the libido, and hence the birth of the soul. The serpent circle becomes a spiral, a symbol of hope, breaking the curse of everlasting recurrence (Chewia). The serpent is the first manifestation of Christ ("I come not to bring peace, but the sword"), and the companion of other hero-gods. Hence it becomes the sign of rescue, healing and wisdom (Esculapius, Solomon).—*M. E. Morse* (Baltimore).

5095. **Lindemann, E.** *The psychopathological effect of drugs affecting the vegetative system. I. Adrenalin.* *Amer. J. Psychiat.*, 1935, 91, 983-1008.—Clinical and laboratory investigations suggest that a characteristic change in adjustment occurs following the administration of adrenalin. "It is determined in measure and quality by the concrete life situation and type of adjustment at the moment of the experiment." The laboratory investigations dealt with the number of utterances, latency in reaction in word associations, consecutive execution of a simple arithmetical task, and free interpretation of pictures both before and after the administration of the drug.—*R. Goldman* (Clark).

5096. **Loewenstein, R.** *Die phallische Passivität beim Manne.* (Phallic passivity in men.) *Int. Z. Psychoanal.*, 1935, 21, 30-35.—The phallic phase of the libido in men is divided into two stages—a passive and an active one. Fixation at the former may lead to various types of impotence and to certain perversions. A "phallic" type of homosexuality is described.—*S. Rosensweig* (Worcester State Hospital).

5097. **McCord, C. P.** *Bemerkungen zum Stand der Kinderanalyse in Amerika.* (The state of child analysis in America.) *Z. psychoanal. Pädag.*, 1934, 8, 392-396.—The child guidance movement needs to adopt psychoanalytic methods if it is to fulfil its aims. This technique cannot be acquired from the literature, but only through several years' intense study and active work in the principal European centers, notably Vienna and London. It is suggested that psychoanalysis should not only supplement but replace traditional educational psychology.—*H. Beaumont* (Kentucky).

5098. **Misch, K.** *Die biologischen Grundlagen der Freudschen Angsttheorie.* (The biological foundations of the Freudian theory of anxiety.) *Int. Z. Psychoanal.*, 1935, 21, 62-67.—An attempt to stimulate research on the physiological aspects of psychoanalytic phenomena is made by presenting the results of a specific study along this line. Patients suffering from anxiety who were injected with acetylcholin, a substance which arouses the parasympathetic, were found to be completely relieved for the duration of the drug's action. The conclusion is drawn that anxiety is due to an arrest in the discharge of the aroused sympathetic nervous system. Since sexual

passion in its early phases has the same bodily expression as anxiety, the arousal of the eventually blocked sympathetic may be attributed to sexual stimuli. Neurotic anxiety would then be due to a "libido arrest" and this concept may be reduced to physiological terms.—S. Rosenzweig (Worcester State Hospital).

5099. Neri, V. *Studi sperimentali sul meccanismo del sonno.* (Experimental studies on the sleep mechanism.) *Cervello*, 1934, No. 5.—The author excited the infundibulus in two dogs with crossed circulation; one of them fell asleep, presenting all the features of physiological sleeping. He concludes that sleep can be effected through a merely nervous and probably inhibitory mechanism.—G. M. Hirsch (Rome).

5100. Ostromislensky, I. *Morphinism.* *Med. Rec., N. Y.*, 1935, 141, 556-560.—The author discusses the symptomatology of morphine withdrawal, particularly the physiological manifestations. He then gives the characteristics of morphinism as the development of addiction after 20 to 25 days of continuous usage, the development of marked tolerance for the drug, the persistence of an easily aroused physiological need for morphine even years after a "cure," the existence of a minimum dosage requirement during addiction, the possibility of replacing the minimum requirement with a definite quantity of some derivative or analogue of morphine and the necessity in addiction of constantly increasing the minimum dosage. These characteristics are discussed, following which the author treats of Bishop's theory of morphinism, which postulates the physiological production of a special antidote, a theory not confirmed by experimental investigation. He then offers an anaphylactic theory of morphinism which he bases upon the physiological reactions of morphine withdrawal and the above mentioned characteristics of morphinism. He feels that this anaphylactic theory is substantiated by the methods required in the treatment of withdrawal symptoms, and he discusses the use of diphenylmethylpyrrolonyl in the therapeutics of addiction.—M. H. Erickson (Eloise Hospital).

5101. Perrotti, N. *Die Rhigophobie.* (Rhigophobia.) *Int. Z. Psychoanal.*, 1935, 21, 68-77.—Rhigophobia—phobia of cold—is described as a clinical entity and found to be frequently associated with fear of dampness and wetness. The phobia is often derivable from the child's early experiences of bed-wetting, which were accompanied by guilt feelings because they violated a prohibition. Relationships to the castration complex, masturbation conflict, exhibitionistic tendencies and the trauma of birth are discussed.—S. Rosenzweig (Worcester State Hospital).

5102. Rieti, E. *La psicoanalisi in Italia.* (Psychoanalysis in Italy.) *Ann. Osp. psichiat., Prov. Genova*, 1933, 4.—A critical review of the activity of the Italian psychoanalysts and of those who have so far written about psychoanalysis in Italy.—G. M. Hirsch (Rome).

5103. Schmideberg, M. *Zur Wirkungsweise der psychoanalytischen Therapie.* (On the *modus operandi* of psychoanalytic therapy.) *Int. Z. Psychoanal.*, 1935, 21, 46-54.—Every form of psychotherapy depends upon the individual's own self-healing tendencies. The differences between the various methods are due to the different self-healing tendencies of which they make use. Various types of psychotherapy, including hypnosis, Ferenczi's active therapy, and the conventional Freudian technique are discussed, and a comparison of analysis with education is made.—S. Rosenzweig (Worcester State Hospital).

5104. Sharpe, E. F. *Similar and divergent unconscious determinants underlying the sublimations of pure art and pure science.* *Int. J. Psycho-Anal.*, 1935, 16, 186-202.—The divergent mechanisms underlying science and art are those of introjection and projection. The scientist deals with his psychical problems in terms of the external universe, the artist in terms of himself. In one thought-processes predominate, in the other body-knowledge and bodily processes. These mechanisms deal with the preservation of the good object in the self from aggressive infantile fantasies due to internal or external frustration. In both sublimations there is found the fantasy of a massive imago. These mechanisms function in terms of reality; science with external reality, the artist with works conditioned to a real medium. The artist, through harmony and design, identifies himself with the good experience; the scientist, working with facts based on bodily experience, triumphs over aggression and in fantasy preserves the good imago. Neither pure scientist nor pure artist is interested in work because of its utilitarian value. Both retain a spontaneity and simplicity of childhood. Adaptation to adult reality is faulty and concerned only with seeking and creating and not with applying. Science and art are two divergent methods of knowing the universe, internal and external. Thus projection and introjection are complementary processes.—M. H. Erickson (Eloise Hospital).

5105. Stärcke, A. *Die Rolle der analen und oralen Quantitäten im Verfolgungswahn und in analogen Systemgedanken.* (The role of anal and oral quantities in delusions of persecution and in analogous systematizing.) *Int. Z. Psychoanal.*, 1935, 21, 5-22.—The peculiar manner in which anal fixations form the basis of delusions of persecution is the central idea of this paper. Some of the structural characteristics of paranoid thinking are also discussed.—S. Rosenzweig (Worcester State Hospital).

5106. Van der Horst, L. *Lessen in de heden-daagsche psychologie. IV. Over den aard van het onbewuste.* (Lessons in contemporary psychology. IV. The nature of the unconscious.) *Ned. Tijdschr. Psychol.*, 1935, 3, 129-135.—The author analyzes Freud's concept of the unconscious and points out the similarity between his and Nietzsche's metaphysical ideas. The latter's "herd-idea" is reflected in Freud's victory of the reality principle over the pleasure principle, which is the basis of morality. Freud's mythological concept of the

original father of the race is similar to Nietzsche's super-man. According to Freud, all deviations from the psychic average, all inner neglect, all neurotic conditions are connected with the development of infantile sex life, with a displacement of the libido. But his mechanisms are supposed to include not only social inferiorities, perversions and neuroses but also genius and talents, while suicidal tendencies, fears and ennui may be closely related to sexual development and attachment of the libido.—*H. Beaumont (Kentucky)*.

5107. Wile, I. S. Auto-suggested dreams as a factor in therapy. *Amer. J. Orthopsychiat.*, 1934, 4, 449-463.—This is a study of 25 children (ages from 5-8 to 14-6, IQ from 73 to 135) whose dreams caused behavior that inhibited normal activity during the day and hampered restful sleep. Common characteristics were: recurring terrifying dreams, based on actual experiences, similar to obsessive imagery and with intensive fear elements (related to pavor nocturnus). Three methods of treatment were used: (1) auto-suggested dreams to replace the fear dream; (2) hetero-suggested dreams, auto-suggestively applied; (3) indirect suggestion. The median times of marked behavior changes for the three groups were: (1) three months; (2) two months; (3) one month. Median times for complete cessation of terror dreams were: (1) three months; (2) five months; (3) two months. In the first group the auto-suggested dream appeared after 5 weeks. Though the number of cases is small, results seem to suggest that auto-suggested dreams are slightly more effective, but that with a hetero-suggested formula there was a very early modification of behavior. These dreams offer little support to Freud's concept of sex conflict or to that of inferiority complexes. The suggestion therapy, applied just before the onset of sleep, is valuable in treating a special type of fear dream, based on earlier conscious experiences.—*H. Beaumont (Kentucky)*.

[See also abstracts 5109, 5119, 5126, 5153, 5162, 5184, 5191, 5207, 5291, 5327, 5362, 5409, 5410.]

NERVOUS AND MENTAL DISORDERS

5108. Abrahams, A. Physical aspects of psychological disease. *Lancet*, 1935, 228, 473-476.—General consideration of the mind-body problem. "An uncritical pan-psychological attitude has to a considerable extent superseded the preceding non-psychological period in medicine which refused to accept Freud as a sort of Moses pointing the way to the promised land. And the conscientious practitioner finds himself at the cross-roads bewildered and undecided, when dealing with a certain type of patient, whether to send her stools to be analyzed by a pathologist or her mind to be analyzed by a psychologist."—*D. J. Ingle (Mayo Foundation)*.

5109. Alexander, F. Evaluation of statistical and analytical methods in psychiatry and psychology. *Amer. J. Orthopsychiat.*, 1934, 4, 433-448.—The significance of the psychoanalytic technique lies in the fact that, through certain technical devices, it makes communication through speech a reliable

method of psychological investigation. Without the confessional situation information thus obtained is unreliable (questionnaires). Only by using free association and by taking rationalization into account can insight into the dynamic play of motives be obtained. Though statistical studies can give information about the numerical spread of relations established by other methods, causal connections can only be established by an analysis (not necessarily psychoanalysis) of individuals. The author gives examples to support his thesis that the hierarchy of scientific methods is: experimental, comparative analytic, statistical. Where either of the two other approaches is possible, it is senseless to use the statistical method. In the study of personality there is no other reliable method, apart from the analytical and experimental, than the progressive accumulation of abbreviated but carefully observed individual clinical studies.—*H. Beaumont (Kentucky)*.

5110. [Anon.] Rapporti fra psicologia e psichiatria (XXXVIII congresso degli alienisti francesi, Lione, ottobre 1934). (Relation between psychology and psychiatry. Thirty-eighth congress of French alienists, Lyons, Oct. 1934.) *Riv. Psicol. norm. patol.*, 1934, 30, 262-264.—*T. M. Abel (General Education Board)*.

5111. Antoni, I. Zur Frage der konstitutionellen Nervosität und der neurasthenischen Reaktion. (The problem of constitutional nervousness and the neurasthenic reaction.) Kiel: Lüdtke, 1935. Pp. 18.—*R. R. Willoughby (Clark)*.

5112. Bailey, H. Nursing mental diseases. (3rd rev. ed.) New York: MacMillan, 1935. Pp. 258. \$2.50.—This third revised edition contains 22 chapters, the first three of which cover the history of the care of the mentally sick, legal aspects of mental disorders, and personality development, alteration and adjustment. The next two chapters discuss the causes and classification of mental disease and their symptomatology. The following two chapters discuss nursing qualifications, nursing measures, dangers, precautions, and emergencies. The next 11 chapters are devoted to the nursing measures for each of the major types of psychoses. There follow chapters on mental deficiency, mental hygiene, therapeutic measures, and hydrotherapy. A list of text and reference books, a glossary, and an index are appended.—*M. H. Erickson (Eloise Hospital)*.

5113. Baragar, C. A., Davidson, G. A., McAlister, W. J., & McCullough, D. L. Sexual sterilization. Four years experience in Alberta. *Amer. J. Psychiat.*, 1935, 91, 897-923.—A report of 206 cases which had been operated upon in accordance with the law which "provides for the sexual sterilization of certain mental inmates of mental hospitals whom it is proposed to discharge if the board is unanimously of the opinion that this may safely be done providing the danger of transmission of the disability to progeny were eliminated." Psychotics and mental deficient with histories of having been social problems were given operations. There is no evidence that sterilization leads to change in libido, sex satisfaction, or lower

standards. 60.8% of the cases had hereditary taints.—*R. Goldman* (Clark).

5114. Baranenko, S. N., & Kopustinski, E. A. [Concerning the contrasting action of concussion on psychosis.] *Sovetsk. Nevropatol.*, 1935, 4, 111-117.—The etiological role of cranial traumas is shown in three cases. In the last a normal boy of seven years, after brain concussion, showed an asocial symptom-complex during four years. After a second accident (repeated brain concussion) the normal character and behavior were restored. The phenomenon of the contrasting action of concussions shows the unity of the fundamental cause of appearance and disappearance of profound changes in the child's personality.—*A. Yarmolenko* (Leningrad).

5115. Barnacle, C. H., Ebaugh, F. G., & Lemere, F. Association-motor investigation of the psychoneuroses. *Amer. J. Psychiat.*, 1935, 91, 925-937.—A modification of Luria's association-motor apparatus was used to study 50 psychoneurotic reactions and 50 normal ones as a part of a general investigation of the various reaction types. The apparatus is described and reference made to a new portable form. "There are four separate components of the complete reaction which are recorded for the purpose of discovering any disorganization of response due to affect created by the stimulus word." These are: (1) reaction time for the association; (2) the type of association as evidenced by the speech response; (3) any irregularity in the right hand (voluntary) pressure; and (4) involuntary left hand tremors or pressures. Individual records are reproduced and discussed. A comparison of different psychoneurotic reaction types shows that tension in the anxiety states is more apt to be generalized, while in the obsessive-compulsive groups "it is fairly well localized to the psychogenic factors. The anxiety states also show a greater tendency for tension to be expressed in prolonged reaction times and greater speech disturbances than in the hysterical and obsessive-compulsive."—*R. Goldman* (Clark).

5116. Betzendahl, W. *Die Ausdrucksformen des Wahnsinns*. (Forms of expression of insanity.) Berlin: Karger, 1935. Pp. 112. RM. 12.—A primarily biological study of endogenous psychoses, in which growth and old age are of central importance. In their most striking manifestations the psychoses affect psychic structures. Individual maturation and decline are seen in connection with collective cultural stages, which throws light on the various forms of insanity. Bodily and social factors are considered equally, and life history is seen as of equal importance with consciousness of self. The relation between patterns of space and time characterizes the difference between manic-depressives and schizophrenics.—*W. Betzendahl* (Berlin).

5117. Böhme, A. *Psychotherapie und Kastration*. (Psychotherapy and castration.) Munich: Lehmann. Pp. 183. RM. 6.50.—Böhme advocates psychotherapy as an alternative to castration for sexual deviates and delinquents. He has used the method in his criminal practice since 1927, and he here describes 65 cases (in addition to 100 previously re-

ported) successfully treated and enabled to live in the community. Graphology is an additional aid in the study of these patients.—*A. Böhme* (Chemnitz).

5118. Bragman, L. J. The case of John Ruskin. A study in cyclothymia. *Amer. J. Psychiat.*, 1935, 91, 1137-1159.—"Parental installation" produced this classic example of the "psychological sin of over-protection." Descriptions of the visual and auditory experiences during psychotic attacks are quoted.—*R. Goldman* (Clark).

5119. Brill, A. A. Remarks introductory to the symposium on the relation of psychoanalysis to psychiatry. *Amer. J. Psychiat.*, 1935, 91, 1089-1092.—*R. Goldman* (Clark).

5120. Bryan, W. A. State hospitals as training centers. *Ment. Hyg., N. Y.*, 1935, 19, 405-415.—The psychiatric situation in its relationship to the problem of medical education is analyzed. State hospitals should be utilized as training centers in medical education, but before such relationship can be established the hospital and medical school must make certain changes in their attitude toward the field of psychiatry. Ways of correcting these shortcomings are discussed in some detail.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.).

5121. Burkhart, R. A. Guiding the adolescent to mental health. *Relig. Educ.*, 1935, 30, 31-35.—A discussion of common expressions of maladjustment: drifting, concealment of activities, feeling of insecurity, and ideas of persecution. A program of mental health should give an individual opportunity to live his own life from birth on; immaturity should be recognized as such, not confused with evil; and each individual should have a wholesome environment.—*R. Goldman* (Clark).

5122. Burrow, T. Fallacies of the senses. II. *Scientia, Bologna*, 1935, 57, 431-441.—A partitive or symbolic substitution has come to stand for the organism's total attention reaction, that is, it tends to dictate the physiological behavior of the organism as a whole. Thus, the manifest signs and symptoms that represent the individual's "mental" pathology are seen to be the result of an imbalance in physiological function within the organism as a total process. This substitution is significant in problems of mental and nervous disorders, and medically as well as socially, because of its influence upon the processes of man's adaptation to the environment, both as an individual and as a community.—*M. Gifford* (Jamaica Plain, Mass.).

5123. Bushong, R. E., & others. Report of the committee on psychopathic personality. *Quart. Bull. Mgng Off. Ass. Ohio Dep. publ. Welf.*, 1934, 11, No. 4, 7-12.—Psychopathic personality is defined as "a condition either hereditary, congenital, or acquired, affecting the emotional and volitional rather than the intellectual fields and manifested by certain anomalies of character which make satisfactory social adjustment difficult or impossible." The psychopath may be distinguished from the neurotic and the psychotic in that no systematized complex of symptoms is

evident in the former. The following twelve-point scale is elaborated for the diagnosis of the condition: deficiency of moral or social sense, complete satisfaction with self, emotional instability, social incompatibility, poverty of sentiment, sexual deviation, social conspicuousness, lack of fixity of purpose, unresponsiveness to training, non-conformity to accepted social conventions, undesirable personality traits, and marked tendency to shiftiness. The outlook for cases of psychopathic personality is not hopeful.—R. M. Stogdill (Columbus).

5124. Cameron, D. E. **Objective and experimental psychiatry.** New York: Macmillan, 1935. Pp. vii + 271. \$3.00.—An attempt to present the quantitative and experimental aspects of psychiatry. After a discussion of the general aspects of experimentation and quantification the author takes up specific approaches. Among these are tests of intelligence, tests of introversion-extraversion, word association tests, conditioned reflexes, blood sugar tests, reactions to ephedrin and adrenalin, respiratory investigations, basal metabolism, blood pressure, sedimentation rate, hemato-encephalic barrier, pH studies, constitution investigations, pathological studies. Heredity and statistical studies are also considered. Under each heading the author gives a critical review of literature. A short chapter on statistical methods is included. Bibliographies for each subject, and indexes.—D. Shakow (Worcester State Hospital).

5125. Campioni, T. **L'educazione dei frenastenici e l'Istituto Medico-psico-pedagogico per anormali psichici minorenni annesso all'Ospedale Psichiatrico di S. Nicolò in Siena.** (Education of phrenasthenic individuals and the Medico-psycho-pedagogical Institute for psychically abnormal minors connected with the Psychiatric Hospital of S. Nicolò in Siena.) *Rass. Studi psichiat.*, 1934, 23, 1253-1345.—G. M. Hirsch (Rome).

5126. Chapman, R. M. **Psychoanalysis in psychiatric hospitals.** *Amer. J. Psychiat.*, 1935, 91, 1093-1101.—The qualifications and training for psychoanalysts intending to work with psychotics are outlined.—R. Goldman (Clark).

5127. Clegg, J. L. **The association of physique and mental condition.** *J. ment. Sci.*, 1935, 81, 297-316.—Technique and devices for measurement are presented, along with measurements from 300 males, equally divided among normal, schizophrenic, and manic-depressive. The age range was 25 to 55 years. Cases with physical deformities were excluded. No circumferences were taken, and except for nose and ear all measurements were skeletal. Small but significant differences were found, as follows: normals exceeded psychotics in height, cranial capacity, width of face, length of arm, breadth of shoulder, length of neck, and length and height of head; psychotics exceeded normals in length of nose; schizophrenics had shorter upper lips, and shorter and narrower ears than either of the other groups; manic-depressives had greater pelvic width and proportionately longer legs than the other groups, and shorter and more shield-shaped

faces than the schizophrenics.—C. J. Herrick (Pennsylvania).

5128. Comby, G. **Cause e prognosi dell'epilessia infantile.** (Factors and prognosis in infantile epilepsy.) *Rinasc. med.*, 1934, No. 22, 686-687.—It has been believed for a long time that essential epilepsy is due to hereditary and family factors. In children epilepsy is always acquired, excluding only congenital syphilitic epilepsy, and it is due either to obstetric trauma which has injured the brain, or to acute encephalitis. Prognosis for children is not so certain as has been commonly thought.—G. M. Hirsch (Rome).

5129. Crespo, E. P. **Alergias y anafilaxias.** Rosario (R. A.): Libreria y Editorial Ruiz, 1935. Pp. 109.—Crespo summarizes (1) the evidence that has led to the belief that allergy is an elemental physical condition specific to certain individuals and (2) the views regarding the intimate relationship between allergic phenomena and endocrinological and vegetative neurological changes. He concludes that the possible validity of these hypotheses rests upon the reality of unconscious influences and that allergic conditions are primarily psychogenic in origin, being manifested by means of the sympathetic nervous system and the endocrines. An account is given of 20 clinical cases of allergy, all of whom improved symptomatically under brief but incomplete analytic treatment. The analytical findings indicated that the allergic manifestations were mainly symbolical expressions of unconscious mental mechanisms.—M. H. Erickson (Eloise Hospital).

5130. Curran, D., & Slater, E. **Mental disorder in general practice.** *Lancet*, 1935, 228, 69-71.—Examination of 150 practitioners' letters describing patients referred for hospital care showed that an adequate knowledge of clinical psychiatry is usually lacking. General discussion of the problem.—D. J. Ingle (Mayo Foundation).

5131. Daniels, G. E. **Neuroses associated with the gastro-intestinal tract.** *Amer. J. Psychiat.*, 1934, 91, 529-540.—R. Goldman (Clark).

5132. Dayton, N. A. **Influence of size of family upon the characteristics of the mentally deficient. Survey of 20,473 retarded children in the public schools of Massachusetts.** *Amer. J. Psychiat.*, 1935, 91, 799-832.—The relationship between the size of the family from which school clinic cases come and their intelligence quotient, accomplishment in reading, language, and arithmetic, physical defects, environment, truancy, conduct problems, personality traits, and the number of other children in the family who are retarded or defective is discussed.—R. Goldman (Clark).

5133. De Leeuw, C. H. **Kentering in de psychopathologie.** (Excursion into psychopathology.) *Ned. Tijdschr. Psychol.*, 1933, 1, 30-39.—(Not seen.)—H. Beaumont (Kentucky).

5134. Del Greco, F. **La condotta negli individui con "instabilità mentale."** (The behavior of individuals affected by "mental instability.") *Ann.*

Osp. psychiat. Perugia, 1934, No. 2-3, 101-110.—The author describes the psycho-clinical and ethological features in these individuals and concludes that the conditions which determine this mental instability are: intense neuropsychic exhaustion, a psychically abnormal or neurotic constitution, and a special social situation.—G. M. Hirsch (Rome).

5135. Doll, E. A. The Vineland social maturity scale. *Train. Sch. Bull.*, 1935, 32, 25-32; 48-54; 68-74.—These articles list items the central purpose of each of which is to represent some aspect of the ability to look after oneself. They avoid measurement of intelligence, skill, and achievement.—E. M. Achilles (Columbia).

5136. Dunbar, H. F. Physical-mental relationships in illness. Trends in modern medicine and research as related in psychiatry. *Amer. J. Psychiat.*, 1934, 91, 541-562.—"Complex symptomatology, including disturbances throughout all the organ systems, can be satisfactorily treated only if the structure and development of the patient's personality be taken into consideration."—R. Goldman (Clark).

5137. Dussik, K. T. Manisch-depressive Psychose bei einem elfjährigen Kinde mit gekoppelt vererbter endokriner Stigmatisierung. (Manic-depressive psychosis in an 11-year-old child combined with hereditary endocrine stigmata.) *Psychiat.-neurol. Wschr.*, 1934, No. 26, 305 ff.—The case of an 11-year-old boy who developed severe manic attacks and showed endocrine pathology similar to that shown by his father, who had gone through a depressive illness.—D. Shakow (Worcester State Hospital).

5138. Eddison, H. W. Depression: normal and abnormal. *J. ment. Sci.*, 1935, 81, 370-375.—From the child's point of view mother and child form a single organism, this union constituting pleasure and separation pain. Weaning thus involves a psychic trauma. Depression and hate, caused whenever there is pain, are found both at weaning and at the anal stage, with education of the sphincters. Normal adult grief is a regression to the oral stage, while melancholic grief results from a fixation there. Normal grief is referred to a breaking of the external and melancholic grief of the internal barriers of the ego; in the latter case the preceding anxiety strengthens the barrier against stimuli from within. A man heals the wound of weaning by choosing a mother substitute; a woman, by primary masochism, which invites a reopening of the wound.—C. J. Herrick (Pennsylvania).

5139. Edwards, J. M. The mental regulation of intestinal activity. *J. ment. Sci.*, 1935, 81, 376-388.—A study of the presence, degree, and type of constipation among psychotic patients shows uniform rather than merely statistical correspondence with mental condition. The view is held that mental state is a tendency reflected in all organic function. In the cases studied the constipation had not yielded to direct treatment by medicine or exhortation, but improved immediately with mental improvement.—C. J. Herrick (Pennsylvania).

5140. Eiser, A. F. Neuere Ergebnisse über die Wirkung der Kastration bei Sexualverbrechern. (Recent findings on the effect of castration on sexual criminals.) Bochum-Langendreer: Pöppinghaus, 1934. Pp. 22.—R. R. Willoughby (Clark).

5141. Erbslöh, J. Ueber psychische und nervöse Störungen bei perniziöser Anaemie (mit besonderer Berücksichtigung differential-diagnostischer Schwierigkeiten). (On psychic and nervous disturbances in pernicious anemia, with special emphasis on differential-diagnostic difficulties.) Bonn: Kubens, 1934. Pp. 35.—R. R. Willoughby (Clark).

5142. Findlay, D. Mental deficiency. *Lancet*, 1935, 228, 539-544.—The author presents an analysis of a series of 256 cases of low-grade mental deficiency met in his own practice. The study tends to discredit the idea that heredity plays an important role in the causation of mental deficiency. Birth injury is regarded as a more important etiological factor.—D. J. Ingle (Mayo Foundation).

5143. Fritzsche, R. Eine familiär auftretende Form von Oligophrenie mit röntgenologisch nachweisbaren Kalkablagerungen im Gehirn, besonders in den Stammganglien. (A familial form of oligophrenia with roentgenologically demonstrable calcareous deposits in the brain, especially in the basal ganglia.) *Schweiz. Arch. Neurol. Psychiat.*, 1935, 35, 1.—An extensive genealogy and illustrations of the calcareous foci accompany the report.—P. Krieger (Leipzig).

5144. Fumarola, G. Il dolore di capo. (Headache.) *Athena*, 1934, No. 10, 304-308.—Considerations on headaches due to different factors; symptomatic importance of headache and its etiological and pathogenic moments.—G. M. Hirsch (Rome).

5145. Glover, E. A developmental study of the obsessional neurosis. *Int. J. Psycho-Anal.*, 1935, 16, 131-144.—The significance of obsessions may be determined only by study of the relations of the disease in hysteria and psychoses. Obsessional neurosis permits a regressive flight from anxiety induced by advancing development, and at the same time it serves to stem that regression. Specific factors to be considered are stable combinations of endopsychic factors and environmental stimuli associated exclusively with the particular neurosis. Approaches are (1) discovering specific affects or combinations of affects; (2) discovering specific mechanisms or combination of mechanisms exploited; (3) discovering developmental phases reflected by symptom formation. Obsessions are displaced derivatives serving instinctual defense, and primarily the obsessional state is a sequence of alternating affects with a simple unconscious ideational content and concerned with subject-object relations. The developmental approach may be summarized thus: (1) the larger symptom constructions are residues of malformation contributed by developmental phases; (2) the characteristic features derive from "a primacy of developmental phases and mechanisms"; (3) regression has both positive and negative functions. Study of unconscious fantasy systems of childhood and of

transitional neuroses of the drug-addiction type indicate that the main function of the obsessional system is consolidation of the advantages of introjection and projection and the avoidance of exclusive dependence on one mechanism. This results in the division of mental tensions by the expansion of displacement mechanisms.—*M. H. Erickson* (Eloise Hospital).

5146. **Gregory, M. S.** *Psychiatry and problems of delinquency.* *Amer. J. Psychiat.*, 1935, 91, 773-781.—From the psychiatric viewpoint there are three types of delinquents: (1) the relatively normal, (2) the non-psychopathic personality deviate, and (3) the true psychopathic personality. There are "far more 'old offenders' among the psychopaths than among the delinquents classed as non-psychopathic."—*R. Goldman* (Clark).

5147. **Gretelskaja-Albatz, E.** *Zur Klinik der Schizophrenie des frühen Kindesalters.* (Clinical characteristics of schizophrenia in early childhood.) *Schweiz. Arch. Neurol. Psychiat.*, 1935, 35, 30.—The findings in infantile schizophrenia confirm Sucharewa's conclusions. Cases in which the endogenous element predominates are the least pronounced and have a mild course. The acute progressive cases show a smaller percentage of hereditary factors. The prognosis is decidedly worse in young children than in those nearer puberty or in adults.—*P. Krieger* (Leipzig).

5148. **Grossmann, K. D.** *Sensibilität und stereognostische Störung bei traumatischer Hirnschädigung.* (Sensation and stereognostic disturbances in traumatic brain injury.) B. Adlershof: Krull, 1935. Pp. 18.—An inaugural dissertation with bibliography. In three patients with injury in the temporal region, tactile perception was studied by means of reproduction of geometrical figures through descriptions and sketches. All the cases had perceptive disturbances: a heightened threshold for stimuli, disturbances of discrimination, localization, deep sensibility, etc. The patient with the greatest perceptive defects showed by far the best stereognostic attainment. Grossmann concludes that there is a special stereognostic sense.—*O. Buchheim* (Berlin-Charlottenburg).

5149. **Hackfield, A. W.** *Crimes of unintelligible motivation as representing an initial symptom of an insidiously developing schizophrenia. A study of the comparative effects of penitentiary vs. hospital regime on such cases.* *Amer. J. Psychiat.*, 1934, 91, 639-668.—Atrocious crimes of an unintelligible motivation committed by persons previously socially and economically adjusted may occur during the prodromal stage of an insidiously developing schizophrenia. They are symptomatic of a latent schizophrenia. The hardships of penitentiary life in themselves do not precipitate psychoses.—*R. Goldman* (Clark).

5150. **Hackfield, A. W.** *The ameliorative effects of therapeutic castration in habitual sex offenders.* *J. nerv. ment. Dis.*, 1935, 82, 15-29.—The limited use of castration for therapeutic purposes is pointed out. Follow-up studies of the 40 cases submitted to therapeutic castration reveal that on a basis of the findings

they could be classified in four different groups. The first of 22 cases comprises cases of erotically perverse psychopathic personalities with normal or retarded intelligence, who because of offenses had been repeatedly submitted to punishment and upon whom castration was performed with good results without or with minimum sequelae. The second group includes cases of male homosexual psychopathic personalities who, because of repeated homo- and perverse sexual practices had been repeatedly and unsuccessfully sentenced to penal servitude, who following castration were cured of their desire to commit abnormal sex offenses.—*C. R. Atwell* (Boston Psychopathic Hospital).

5151. **Hardcastle, D. N.** *A suggested approach to the problems of neuro-psychiatry.* *J. ment. Sci.*, 1935, 81, 317-331.—In the attempt to explain behavior through neurological structure we must take account of the segmental nature of the central nervous system, of the comparatively late appearance of cephalad additions to it, and of the fact that the highest associative centers in newborn infants are thalamic. Consciousness exists ontogenetically at different levels, and as maturation proceeds the cephalad additions to the nervous system dominate function. This development is discussed with reference to memory, fantasy, eidetic imagery, intelligence, and the role of affective values in facilitating or inhibiting integration. Existing therapeutic methods are interpreted in terms of the above theories.—*C. J. Herrick* (Pennsylvania).

5152. **Harrington, M.** *The problem of the defective delinquent.* *Ment. Hyg., N. Y.*, 1935, 19, 429-438.—The mental hygiene problem presented by the feeble-minded criminal is discussed. There is a brief discussion of the causes of delinquency among mental defectives. The problem is chiefly a pedagogical one. Adequate education of the young mental defective and reeducation of those already in penal institutions are suggested as treatment measures. Better education along mental-hygiene lines is most essential for progress with this problem. Schools must aid the psychiatrist in preventing mental ills by providing better educational facilities.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.).

5153. **Hinsie, L. E.** *The relationship of psychoanalysis to psychiatry.* *Amer. J. Psychiat.*, 1935, 91, 1103-1115.—"Almost from the beginning of psychoanalysis psychiatrists in hospital practice have found the principles of psychoanalysis to be indispensable to the understanding of psychogenic reactions."—*R. Goldman* (Clark).

5154. **Hogan, B. W.** *Psychology of the sick.* *Nav. med. Bull., Wash.*, 1935, 33, 373-378.—The physically sick patient also has a problem of adjusting to his changed condition. The physician, by cultivating a psychiatric point of view, can deal with this psychological problem as well as with the physical one.—*C. M. Louttit* (Indiana).

5155. **Hönigswald, R.** *Ueber Ideenflucht.* (Flight of ideas.) *Ned. Tijdschr. Psychol.*, 1933, 1, 236-253.—(Not seen.)—*H. Beaumont* (Kentucky).

5156. Horton, C. B. **Thinking and practice in forensic psychiatry.** *Ment. Hyg., N. Y.*, 1935, 19, 447-448.—Psychiatric jurisprudence is in an unsettled state, but the Bar Association is trying to deal with this problem. Forensic psychiatrists and orthopsychiatrists must not permit their thinking to become limited by "outworn concepts of law which are troubling the lawyers." This discrepancy between forensic practice and psychiatric thinking is made by R. Schwarz in the opening paragraph of his article in the July 1934 *Mental Hygiene*, entitled *The Criminal Insane under Jurisprudence*. This paragraph is "a complete recantation of the mental-hygiene concept of crime and delinquency." Psychiatry has long since given up the old standard of "right and wrong" and thinks in terms of cause and effect. Schwarz also rejects the factors of heredity and environment in producing crime. The modern psychiatric concepts of behavior need to be retained.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.)

5157. Huebner, F. M. **Die erkrankte Seele; letzte Hintergründe bei geistigen Störungen.** (The sick soul: ultimate backgrounds in mental disturbances.) Kampen auf Sylt: Kampmann. Pp. 50. RM. 1.80.—This is the second of a series of three publications, the whole entitled "The Other in Us." The series is concerned with the atmospheric fluid envelope which surrounds the essential being of man. In mental diseases this environment is filled with demonic elements which devour the patient like vampires, and from which he can be freed by exorcism. Mental disease represents the collapse of the conscious rational life, for life and creativeness are rooted in madness (chaos) from which they must struggle heroically upward into order and clarity (cosmos).—*F. M. Huebner* (The Hague).

5158. Johnson, H. K. **The symptom of loss of feeling. A Gestalt interpretation.** *Amer. J. Psychiat.*, 1935, 91, 1327-1341.—A "new qualitative dimension in consciousness" which is referred to as "richness-flatness" is discussed. The components of moods are treated as Gestalt properties. The "richness" in mental life is "found to be intelligible only when we adopted a configurational point of view; the essentially Gestalt-like nature of these mood fringes would otherwise have eluded us."—*R. Goldman* (Clark).

5159. Jung, C. G. **Allgemeines zur Komplextheorie.** (General considerations on the theory of complexes.) (Kultur- & Staatswissenschaftl. Schriften der E. T. H.) Aarau: H. R. Sauerländer, 1934. Pp. 20.—The scientific concept of the emotionally toned complex was introduced by Jung somewhat more than thirty years ago. The existence of the complex was demonstrated by disturbances in the association experiment. The complex is relatively autonomous and is therefore a part of the psyche. Such psychic fragments are prominent in neurosis, schizophrenia, and the primitive mental state.—*C. G. Jung* (Küsnacht-Zürich).

5160. Jung, C. G. **Grundsätzliches zur praktischen Psychotherapie.** (Basic principles of practical psy-

chotherapy.) *Zbl. Psychother.*, 1935, 8, 66-82.—The newest psychotherapeutic development is a dialectic procedure between two psychic systems. Every departure from this, including all theories, techniques, and interpretations of another's personality, spells suggestion. As psychic systems present infinite variability and different degrees of complexity, so there are different psychotherapeutic methods, all of them valid, and an infinite variety of relatively true results; but for intelligent and highly developed patients the only procedure is the dialectic. If cure through transformation involves too great a sacrifice, the analyst must content himself with leaving the individual path open. When archetypes from the collective unconscious appear, individuation seems to be a regression, and many physicians, realizing the impossibility of a rational approach, direct these patients to religion. This course is historically correct. But for patients who are not influenced by the mythical survivals in religion (and mass political movements), the only recourse is the dialectic development of the patient's own mythical material. Jung's method is to begin with Freud's or Adler's technique, according to whether the pleasure or the power principle predominates. When, however, the patient reaches a standstill or produces mythical material, reductive analysis is stopped and individuation and the dialectic procedure are started.—*M. E. Morse* (Baltimore).

5161. Kinberg, O. **Mord å eget barn utom äktenskapet, begånget av schizoid kvinna i tilstånd av psykologisk missanpassning.** (Murder of her own illegitimate child, committed by a schizoid woman in a state of psychological maladjustment.) *Svenska Läkartidn.*, 1935, 32, 582-596.—The woman's difficulty in adjusting to a broken engagement, venereal disease, and a not too promising future, in spite of sympathetic parents, resulted in an attempt to drown herself and her 6-year-old illegitimate child. Only the woman was found and survived. On the recommendation of the legal-psychiatric clinic in Stockholm, she was not sentenced but hospitalized.—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5162. Klein, M. **A contribution to the psychogenesis of manic-depressive states.** *Int. J. Psychoanal.*, 1935, 16, 145-174.—Depressive states in their relation to paranoia and to mania are discussed in the light of material obtained from the analysis of adult and juvenile patients who manifested depressive states in severe neuroses or border-line conditions with a mixture of paranoid and depressive trends. Introjection, manifested differently in paranoid and depressive types, its role in the development of the super-ego for both types, and the function of anxiety contents in both types are discussed. Mania is characterized by a sense of omnipotence in which psychic reality is denied as a means of denying external reality, whereby mastery of objects may be achieved. A discussion follows of the parts played by paranoid, depressive, and manic positions in the development of the normal child. The author then summarizes

with the statement that "the infantile depressive position is the central position in the child's development. The normal development of the child and its capacity for love would seem to rest largely on how the ego works through this nodal position. This again depends upon the modification undergone by the earliest mechanisms (which remain at work in the normal also) in accordance with the changes in the ego's relations to its objects and especially upon a successful interplay between the depressive, the manic, and the obsessional positions and mechanisms."—*M. H. Erickson* (Eloise Hospital).

5163. **Leavitt, F. H.** The etiology of temporary amnesia. *Amer. J. Psychiat.*, 1935, 91, 1079-1088.—In a study of 104 cases, "the great classifications were organic brain, functional mental disease, the psychoneuroses, exogenous and endogenous toxemias, epilepsy and malingering." The underlying etiological factors are many. Except for the psychoneuroses, hysteria, and malingering groups, there were more male than female cases.—*R. Goldman* (Clark).

5164. **Lewis, A., & Minski, L.** Chorea and psychosis. *Lancet*, 1935, 228, 536-538.—Three cases in which a psychosis was associated with chorea are presented. The etiological, clinical and pathological difficulties are discussed.—*D. J. Ingle* (Mayo Foundation).

5165. **Lewis, A. J.** Prognosis in schizophrenia. *Lancet*, 1935, 228, 339-341.—The development of schizophrenia usually does permanent damage to psychic life. Hereditary guides to prognosis for this disease are dubious except in the rare instances where both parents are affected. Body constitution of the patient is of great assistance to prognosis. The pyknic body type is more likely to be associated with recovery than is the asthenic physique. When the onset is abrupt, recovery is more likely than when the time of onset is hard to fix. The nature of the symptoms offer a poor guide to their sequel. Treatment may influence the course of the disease favorably.—*D. J. Ingle* (Mayo Foundation).

5166. **Lindner, T.** Sömnmedelsmissbruk och folkhälsan. (Public health and the misuse of means for inducing sleep.) *Soc.-med. Tidskr.*, 1935, 12, 101-107.—A general discussion of the public crusade started by Swedish physicians and psychiatrists against the prevalent misuse of narcotics for sleep and its dangers to public health.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

5167. **Line, W.** Some impressions of British psychiatry. *Amer. J. Psychiat.*, 1935, 91, 1059-1077.—"It appears that British thought is swinging away from the hormic approach to problems of the mind, toward one that gives due regard to the formal characteristics of conscious activity. This tendency is enhanced by the contribution now being made by experimental psychology, which has itself developed beyond the limits set by atomistic and mechanistic methods."—*R. Goldman* (Clark).

5168. **Line, W., & Griffin, J. D. M.** The objective determination of factors underlying mental health. *Amer. J. Psychiat.*, 1935, 91, 833-842.—A pre-

liminary report of an investigation "the purpose of which is to examine personality deviations by means of psychometric techniques." A battery of tests which included the Rorschach, association, and Bernreuter tests and tests for speed of execution, perseveration, and oscillation were used. Two factors were found in the test scores by Thurstone's multiple-factor analysis technique which indicated a differentiation between the extremely unstable (psychotic) and stable (graduate student) subjects. Factor I is tentatively called "objectivity" and Factor II "fluency" or "mobility" of response. A tentative outline of further possible steps in the study of the nature of normal and abnormal functioning is appended.—*R. Goldman* (Clark).

5169. **Malzberg, B.** A statistical study of age in relation to mental disease. *Ment. Hyg., N. Y.*, 1935, 19, 449-476.—Data for this study were obtained from statistics of first admissions to all of the New York state institutions for mental diseases during the three fiscal years ending June 30, 1931. Inasmuch as age of onset of mental disease could not be accurately established, the data pertaining to age at first admission were used. The distributions of the psychoses within given age groups are discussed and illustrated by tables and graphs, as are also the age variations within groups of psychoses.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.).

5170. **Meckies, S.** Psychische und nervöse Störungen nach Strangulationsversuchen. (Psychic and nervous disturbances after strangulation.) *Quakenbrück: Kleinert*, 1934. Pp. 33.—*R. R. Willoughby* (Clark).

5171. **Menninger, W. C.** The interrelationships of mental disorders and diabetes mellitus. *J. ment. Sci.*, 1935, 81, 332-357.—A study of 30 cases of mental disorder associated with diabetes, 93 cases of uncomplicated diabetes, and 400 cases of uncomplicated mental disorder, suggests the existence of a diabetic personality, characterized by diminished alertness of perception, memory disorders, distractibility, sluggish mental activity, hypochondriasis, depression, fear, irritability, apathy, anxiety, and somnolence. Except for rare toxic psychoses diabetes does not determine the type of psychosis which may be associated with it. Psychological conflicts, conscious or unconscious, are suggested as involved in the etiology of diabetes, but it is uncertain whether they ever operate as sole causes. Once associated in the same individual, mental disorder and diabetes are always mutually related, although the initial appearances may have been independent.—*C. J. Herrick* (Pennsylvania).

5172. **Miller, E.** The present discontents in psychopathology. *Lancet*, 1935, 228, 245-249.—Theories in psychopathology have wandered unnecessarily from biological principles and have made erroneous social interpretations. Classification of the issues arising in the field of neurological and psychological interpretation would be an aid to progress in the development of psychopathology.—*D. J. Ingle* (Mayo Foundation).

5173. Minkowski, E. Het tijdsprobleem in de psychopathologie. (The time problem in psychopathology.) *Nederl. Tijdschr. Psychol.*, 1933, 1, 400-411; 497-517.—(Not seen.)—H. Beaumont (Kentucky).

5174. Misch, W. The syndrome of neurotic anxiety: the somatic and psychic components of its genesis and therapy. *J. ment. Sci.*, 1935, 81, 389-414.—Neurotic anxiety requires certain somatic conditions and a state of psychic readiness, which explains why it does not yield to psychotherapy alone. The anxiety is traced to a sexual disturbance which in certain dispositions issues in strong excitation of the sympathetic system, resulting in a major anxiety attack, whose syndrome includes vaso-motor sensations, rapid pulse, paralysis, and fear. The acute attack is followed by neurotic anxiety or some other secondary state. The hypothesis is offered that the fear is somatic in origin, and that the syndrome can be traced to the action of the adrenals. Choline, stimulating the parasympathetic system, is effective in removing both the somatic and psychic components of the neurosis. But after a time the somatic neurosis is built up into a psychoneurosis, which requires prolonged psychotherapy.—C. J. Herrick (Pennsylvania).

5175. Molitch, M. Chronic post-encephalitis in juvenile delinquents. *Amer. J. Psychiat.*, 1935, 91, 843-861.—"The traits exhibited by these children may include every conceivable act, occasional or habitual, and all of the different psychic and emotional states." The younger the child at the time of the acute illness the greater the degree of mental deficiency. Some mental deterioration is found upon psychological reexaminations.—R. Goldman (Clark).

5176. Nicolaus, H. Schizophrenes Krankheitsbild der senilen Demenz. (The schizophrenic clinical picture in senile dementia.) Bonn: Kubens, 1935. Pp. 44.—R. R. Willoughby (Clark).

5177. Norsell, A. Om verkan av bestämmelsen angående intagning på egen ansökan om vård å sinnessjukhus. (On the effect of the law concerning admittance to mental hospitals upon individual applications of the patients themselves.) *Svenska Läkartidn.*, 1935, 27, 980-985.—On the bases of records of admittance from November 1, 1931, to December 31, 1934, from a Swedish mental hospital, a survey is presented of several hundred patients who personally applied for admittance. The most frequent groups were those of manic-depressive insanity and schizophrenia, which were also the most frequent for all patients. Most manic-depressives wrote and signed their own applications while in the depressive phase. Various tables give detailed information concerning such patients. It is stated that the regulation permitting mentally sick persons to apply for service at public institutions undoubtedly has contributed to the placing of patients under treatment much earlier than would have been the case by ordinary commitment.—M. L. Reymert (Mooseheart Laboratory for Child Research).

5178. Parfitt, D. N. Sinusitis in mental disorder. *Lancet*, 1935, 228, 429-431.—When sinusitis is present its treatment does not influence the course of manic-depressive or schizophrenic psychoses, but may be of great benefit in a small percentage of cases with confusional insanity.—D. J. Ingle (Mayo Foundation).

5179. Pollock, H. M. The depression and mental disease in New York state. *Amer. J. Psychiat.*, 1935, 91, 763-771.—A comparison of the populations of mental hospitals from 1929 to 1934 and from 1924 to 1929. Data are given for the various diagnostic groups. "The economic crisis does not seem to be the dominant factor in the increase of first admissions in any one diagnostic group; it is, however, a precipitating factor of importance in all groups."—R. Goldman (Clark).

5180. Potter, H. W. The treatment of problem children in a psychiatric hospital. *Amer. J. Psychiat.*, 1935, 91, 869-880.—A discussion of the types of children to be admitted and the personnel and treatment in the hospital is given.—R. Goldman (Clark).

5181. Rhoades, W. Group training in thought control for relieving nervous disorders. *Ment. Hyg.*, N. Y., 1935, 19, 373-386.—The class in thought control at the public dispensary in Boston was started in 1930. Weekly instruction in mental and moral hygiene is given to the patients in the group. These classes, which last one and a half hours, have as their aim the directing of the impulsive forces of the emotions into constructive rather than destructive channels. A physician gives a detailed explanation of the psychological causes of the neuroses from which the various patients suffer. The appeal is to the emotions instead of to the reasoning power of the patients. Some time is given to testimonies by the patients, and practice is afforded the group in the art of relaxing physically and mentally. Elwood Worcester's method of relaxation is used in these classes and is described in detail in this article.—H. S. Clapp (Grasslands Hospital, Valhalla, N. Y.).

5182. Rosanoff, A. J., Handy, L. M., & Plesset, I. R. The etiology of manic-depressive syndromes with special reference to their occurrence in twins. *Amer. J. Psychiat.*, 1935, 91, 725-762.—90 pairs of twins were studied. The greater percentage of monozygotic pairs in which both of the pair were affected in contrast with the dizygotic pairs indicates that hereditary or germinal factors play an important part in the etiology. From the collected data "it would seem that while manic-depressive syndromes can occur as manifestations of organic cerebral affections, or of various somatic diseases, or as sequels of intranatal or postnatal head trauma, the bulk of the cases occur on an hereditary basis either under ordinary conditions of life or under the influence of external factors which are, for the most part, of psychogenic nature." A hypothesis is offered of the mode of inheritance of manic-depressive psychosis in which the existence of a cyclothymic factor in the autosomes is assumed, and an activating factor in the X-chromosomes. A series of formulas representing

the 54 possible matings of the six genetic types of men and the nine genetic types of women and the theoretically expected genotypic compositions of the resulting offspring are given.—*R. Goldman* (Clark).

5183. Schilder, P. Reaction types resembling functional psychoses in childhood on the basis of an organic inferiority of the brain. *Ment. Hyg., N. Y.*, 1935, 19, 439-446.—Functional psychoses in childhood are generally considered to occur very rarely. Childhood's emotional patterns resemble in some respects manic pictures. The child's incomplete intellectual growth in connection with strong drives leads to results which are similar to results of schizophrenic thinking. The emotional and intellectual peculiarities in children's behavior are greater in number where the brain is inferior. Also, psychotic pictures that are similar to schizophrenia and mania will arise in such cases, although they are not identical with them. The repressive forces will be influenced by every organic inferiority of the brain. Moreover, primitive drives and emotions as well as primitive motor tendencies will show themselves much more openly. Reaction to conflicts will accordingly be less controlled and of longer duration. A bibliography is appended.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.)

5184. Schroeder, T. What is a psychologic recovery? *Psychoanal. Rev.*, 1935, 22, 258-273.—There is a difference between a recovery which is the result of a basic change in the individual's psyche and one in which the only change is in his ability to make a social adjustment. The first kind depends on dynamic changes, the second on mere symptomatic changes in behavior. The following therapeutic methods produce the symptomatic type: unification of symbols (Jung's method), cure by indulgence (permitting the patient to gratify himself), cure by self-knowledge (Adler's method), cure by Otto Rank's method, and "automatic" cure. These are all fallacious. To produce a real cure it is necessary for the analyst not only to aid the analysand in reaching a more mature level by deep analysis, but also to aid him in understanding the meaning, use and advantages to be derived from maturer functioning of the impulses.—*L. S. Selling* (Wayne).

5185. Schulz, B. Sterblichkeit und Tuberkulosensterblichkeit in den Familien Geisteskranker und in der Durchschnittbevölkerung. (Mortality in general and mortality from tuberculosis in families of mental patients and in the average of the population.) *Z. ges. Neurol. Psychiat.*, 1933, 148, 351-381.—The author studied the relation between mortality from tuberculosis and that of all the individuals of an observed group. The mortality of mental patients, especially schizophrenics, was found to be higher than that of the average of the population. In addition, the mortality from tuberculosis in brothers and sisters of schizophrenics who were not themselves mental patients was shown to be higher than that of the average of the population.—(Courtesy *Année psychol.*)

5186. Seabrook, W. *Asylum*. New York: Harcourt, Brace, 1935. Pp. xiii + 263. \$2.00.—An

account of the author's stay of six months in a mental hospital because of alcoholism.—*D. Shakow* (Worcester State Hospital).

5187. Ssolovyev-Elpidinski, J. M. [On so-called "psychic satiation" and its peculiarities in mentally defective children.] In *The mentally defective child*. Moscow: Uchpedgiz, 1935. Pp. 97-174.—Giving to the normal and mentally defective child a monotonous task (dotting or crossing circles), the author states the following peculiarities of the respective working processes: there exists a tendency to the forming of separate independent active whole units. They are marked and separated by the dividing pauses. The structure of the active process is often not enough differentiated. The work of mentally defective children is slower and shorter than in normal children of the same age. The quality is also lower. Psychic satiation comes earlier, and is displayed in work variations and abrupt ending. The small size of work units, their weakness, and the speed and abruptness of their ending are characteristic for the mentally defective child. The grade of these traits correlates with the grade of mental deficiency.—*A. Yarmolenko* (Leningrad).

5188. Ssouhareva, G., & Einhorn, D. Les phénomènes psychiques résiduels chez les enfants après lésions traumatiques de la tête. (Residual mental phenomena in children following traumatic head lesions.) *Z. Kinderpsychiat.*, 1935, 2, 8-17.—Part II, the structure of the mental state following traumatism, by Ssouhareva.—*D. Shakow* (Worcester State Hospital).

5189. Stone, S. The Miller delusion. *Amer. J. Psychiat.*, 1934, 91, 593-623.—The mental strains and psychoses caused by the failure of the prophecies regarding the destruction of the world with the Second Advent (1843) "represent a mass reaction to a certain stimulus when the time was ripe and the emotional state of the public was ready for its reception."—*R. Goldman* (Clark).

5190. Stone, S. What mental hygiene means to a community. *Ment. Hyg., N. Y.*, 1935, 19, 416-428.—The functions of a mental-hygiene clinic in the community are described. The clinic offers its service to physicians, teachers, social workers and judges in the various problem cases that come to their attention. It aids in the adjusting of certain emotional disturbances that occur in the life of the maladjusted individual. Several case studies illustrating these points are given.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.)

5191. Sullivan, H. S. Psychiatric training as a prerequisite to psychoanalytic practice. *Amer. J. Psychiat.*, 1935, 91, 1117-1126.—Intensive therapeutic work with psychotic patients should be required in the education of every psychoanalyst.—*R. Goldman* (Clark).

5192. Tramer, M. Tagebuch über ein geisteskrankes Kind. (Diary on a psychotic child.) *Z. Kinderpsychiat.*, 1934, 1, 154-161.—Second installment of the series. The last half of the first year of

the diary together with comments of the author are presented.—*D. Shakow* (Worcester State Hospital).

5193. Tramer, M. *Tagebuch über ein geisteskrankes Kind.* (Diary on a psychotic child.) *Z. Kinderpsychiat.*, 1935, 2, 17-28.—The fourth section of this diary. It covers from the last quarter of the second year to the first half of the fourth year, during which schizophrenic symptoms appear.—*D. Shakow* (Worcester State Hospital).

5194. [Various.] *Collected papers: Department of Diseases of the Nervous System, Harvard Medical School.* Boston: Eliot Press, 1935.—This is the fifth volume of a new series containing reprints of the 46 papers written by members of the Department of Diseases of the Nervous System, Harvard Medical School, and published during the year 1934. The papers cover chiefly work on neurological problems, but include articles on psychiatry, psychoanalysis and medical history. Appended to the volume are the individual bibliographies of the department members for 1934.—*M. H. Erickson* (Eloise Hospital).

5195. Vygotski, S. V., & Danishevski, I. I. [The mentally defective child.] Moscow: Uchpedgiz, 1935. Pp. 172.—The problem of mental deficiency is discussed from the theoretical and experimental point of view. An attempt to formulate working hypotheses of mental deficiency was made by the late S. Vygotski. A critical survey of K. Lewin's conception is given. The author completes the dynamic theory of hypophrenia by the following doctrine: The dependency of the intellect upon affect, as shown by K. Lewin's experiments, is only one side of the phenomenon, and in altered experimental conditions there can be shown a reversed dependency of affect upon intellect. The unity and mutual dependency of dynamically significant systems, the unity of affect and intellect, is the fundamental conception for the doctrine of mental deficiency of children.—*A. Yarmolenko* (Leningrad).

5196. Wells, F. L. *Social maladjustments: adaptive regression.* In *A Handbook of Social Psychology.* Worcester, Mass.: Clark University Press, 1935. Pp. 845-915.—Presenting illustrations from various literatures, and mentioning the relativity of maladjustment and regression and their relation to the concept of value, the author presents adaptive regression as a correlate of sublimation and schematizes the hierarchy of categories entering into them. He presents subhuman parallels, and discusses regressive phenomena in societal as well as in individual adjustments. A discussion of the dynamics of the process is based on Janet. Return to childhood as a means of regression is criticized. The economic, sexual, social, and imaginal phases of regression in individual adjustment are discussed. With regard to individual manifestations, the place of dissociative phenomena is reviewed, as well as the regressive features in the principal functional psychoses, the argument here having reference to MacCurdy. The role of antisocial conduct in individual adjustment is considered, and there is a concluding discussion of basic conflicts in

the dynamic and ethical phases of regression-sublimation as they affect both the individual and society.—*E. Heibredner* (Wellesley).

5197. Wenger, P. *Zur Technik der Neurosenbehandlung Jugendlicher.* (On the technique of dealing with the neuroses of youth.) *Wien. med. Wschr.*, 1934, Nos. 30, 31.—A discussion of certain aspects of neurosis in youth and its individual-psychological treatment. These neuroses are recognizable by two major signs: through the combative attitude toward adults, especially toward parents, and through the attitude toward the sex problem.—*D. Shakow* (Worcester State Hospital).

5198. Wilson, S. A. K. *Cataplexy.* *J. Neurol. Psychopath.*, 1933, 14, 45-51.—(*Biol. Abstr.* IX: 9355).

5199. Wintsch, J. *Le dépistage précoce des oligophrènes.* (The early investigation of the feeble-minded.) *Z. Kinderpsychiat.*, 1934, 1, 37-49.—Recommendation of the study of reflexes, particularly conditioned reflexes, for the early determination of feeble-mindedness.—*D. Shakow* (Worcester State Hospital).

5200. Wolfe, T. P. *Dynamic aspects of cardiovascular symptomatology.* *Amer. J. Psychiat.*, 1934, 91, 563-574.—"Scientific experiment and clinical observation point increasingly to the significance of psychic factors in the determination of its outcome."—*R. Goldman* (Clark).

5201. Zankov, S. V. [The evolution of the memory of mentally defective children.] In *The mentally defective child.* Moscow: Uchpedgiz, 1935. Pp. 35-96.—The author uses his own method, allowing the comparing of simple and complex memory processes. The defective children show a poor development of higher forms of memory. These higher forms develop mainly in the school age in the defective children.—*A. Yarmolenko* (Leningrad).

5202. Zankov, S. V. [Essays on the psychology of the mentally defective child.] Moscow: Uchpedgiz, 1935. Pp. 176.—The book contains the following chapters: the problem of evolution of the mentally defective child, and the limits of debility; growth and constitution; psychomotor development; mental development (perception, memory, and their evolution); speech and thought; character and personality. All the psychic functions are analyzed in their interrelations. The personality of the mentally defective child is not treated as the result of simple retarded development or as the combination of increased or decreased separate functions. The characterological displays are not casually combined with mental defects, but issue structurally from them. The personality of the mentally defective child is a complex structure resulting from its development and arising on the basis of its primary insufficiency.—*A. Yarmolenko* (Leningrad).

[See also abstracts 4870, 5067, 5071, 5082, 5105, 5244, 5254, 5289, 5316, 5323, 5393, 5394, 5401, 5413, 5419.]

PERSONALITY AND CHARACTER

5203. Allport, G. W. *Attitudes*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 798-844.—The doctrine of attitudes, which has almost completely captured and refashioned the science of social psychology, requires clarification. Historical considerations make it necessary to include a wide range of subjective determining tendencies among attitudes; yet it is possible and desirable to distinguish between attitudes and many correlative forms of readiness-for-response. Attitudes may be *driving* or *directive*, *specific* or *general*, *common* or *individual*. They characteristically have a material or conceptual object of reference, and are "pointed" in some direction with respect to this object. If so generalized that the object and the direction are not identifiable, they merge into the "traits" of personality. Common attitudes can be roughly classified and measured, and when abstracted from the personalities which contain them they constitute the "socius," which is that portion of the unique personality of special interest to social science. Though attitudes are inferred rather than observed, they must be admitted as real and substantial ingredients in human nature, for without them it is impossible to account satisfactorily either for the consistency of any individual's behavior or for the stability of any society. Bibliography.—E. Heider (Wellesley).

5204. Baumgarten, F. *Ein Test zur Ermittlung der Interessen von Kindern und Erwachsenen*. (A test for ascertaining the interests of children and adults.) *Z. Kinderpsychiat.*, 1934, 1, 143-154.—The *Katalogtest* of Tramer, which consists of a list of 438 book titles, is described. Its advantages for determining the interest of subjects is stated to be that interest can be expressed spontaneously and that a wide variety of interests are covered. Its use with different types of subjects is illustrated with protocols taken from the records of children individually examined. The test has also been used as a group test.—D. Shakow (Worcester State Hospital).

5205. Berber, E. *Psychologie der Neugier*. (Psychology of curiosity.) Leipzig: Barth, 1935. Pp. 108. RM. 5.40.—A study of the drives and tendencies which form the basis of curiosity and of the emotions connected with it from early childhood to maturity. Several distinct forms of curiosity are distinguished. It is pointed out that curiosity is indispensable in mental development, that it has great vital significance, but also that it may be dangerous in a biological sense as well as otherwise. A survey of important studies in the field is added.—E. Berber (Hirschberg).

5206. Burger-Villingen, R. *Goethe*. In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 54-61.—Goethe's facial and cranial form was studied on the basis of Burger's law. The form of the skull and of the face does not give any information about the objective productions but only about character dispositions.—P. Klimpel (Leipzig).

5207. Burlingham, D. T. *Mitteilungsdrang und Geständniszwang*. (The impulse to inform and the compulsion to confess.) *Z. psychoanal. Pädag.*, 1935, 9, 127-137.—On the basis of a general discussion of the problem and several examples the following conclusions are reached: The compulsion to confess is caused by the pressure of the feeling of guilt and the need for punishment; its purpose is to relieve the conscience and to obtain masochistic pleasure by accepting punishment. The impulse to inform, on the other hand, is positive. It serves as an exhibitionistic means of approach, to attract, win, and possibly seduce a partner. Its ultimate aim is the acquisition of pleasure.—H. Beaumont (Kentucky).

5208. Decurtius, F. *Beiträge zur Kenntnis der Persönlichkeit Franz Grillparzers (1791-1872)*. (Contributions to the understanding of Franz Grillparzer's personality (1791-1872).) *Allg. Z. Psychiat.*, 1934, 102, 313 ff.—The first part of this study contains a collection of the poet's statements concerning himself, principally from his diary. Even at an early age he manifested a deep psychological understanding and a profound knowledge of himself. The second part consists of an exhaustive graphological study of Grillparzer from the age of 20 to 65, giving a survey of his changing attitudes. Ackerman, who is responsible for this second part, knew nothing about the poet except his name and the titles of two of his works.—P. Klimpel (Leipzig).

5209. Deussen, J. *Vom Wesen des Rhythmus*. (On the nature of rhythm.) *Polit. Erzgh.*, 1935, No. 2, 52 ff.—The author gives a short account of the rhythm theory of L. Klages and relates it to cultural phenomena.—J. Deussen (Markkleeberg).

5210. Dichter, E. *Selbstbeurteilung der eigenen Fähigkeiten und Leistungen*. (Self-judgment of abilities and accomplishments.) *Arch. ges. Psychol.*, 1935, 93, 347-382.—A study is made of the relationship between ability of self-judgment and age level through the use of the anamnestic method. A questionnaire was to be filled out. A strong resemblance revealed itself on different age levels and some worthwhile findings for the psychology of development were revealed. The article compares these age-level findings. The author feels that his studies fall in line with those of Charlotte Bühler on the character traits of various age levels.—A. B. Herrig (Michigan Central State Teachers College).

5211. Gernat, A. *Der Sadismus in der Schrift*. (Sadism in the handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 36-42.—The author believes that in spite of the great difficulties one can determine sadism in the handwriting with relatively great certainty. He assumes that in a sexually abnormal person the sexual excitability does not show a very rhythmical course, and that the strength of the drives greatly exceeds the resistance. Scripts of notoriously sadistic persons show phases of pressure which are distributed in an irregular way, and this is interpreted as an indication of lack of rhythm. Traits which are indicative of

strength of drive, of lack of resistance, and of sadistic cruelty were also found.—*P. Klimpel* (Leipzig).

5212. **Johnson, W. B., & Terman, L. M.** *Personality characteristics of happily married, unhappily married, and divorced persons.* *Character & Pers.*, 1935, 3, 290-311.—The author first reviews a preliminary report on this study (*J. soc. Psychol.*, 1935, 6, 143-171). The present report is summarized as follows: "Outstanding traits of the happily married, both husbands and wives, include emotional stability, social adaptability, uplift interests, and a tendency to conservatism, the men showing more tolerance and sympathy than the women. The unhappily married give most evidence of neurotic and introverted tendencies, intolerant attitudes, and volitional inadequacy. There are, however, several well-defined sex differences, the unhappily married woman being closer to the happily married than to the divorced, and the unhappily married man closer to the divorced than to the happily married. Divorced women, as a group, are especially characterized by self-reliance, independence, tolerance, initiative, and conative intensity. The divorced, both men and women, have more intellectual interests than either of the married groups. Most of the group differences, though not all of them, are in line with expectations based upon common observation."—*M. O. Wilson* (Oklahoma).

5213. **Kikuchi, S.** *Hogo jidō no kōsei.* (Version types of children in juvenile reformatories.) *Kyoiku Shinri Kenkyu*, 1935, 10, 298-318.—Extraverted types were found to have predominance over introverted in juvenile reformatories, but their rate differs according to provinces. Those who are not so extraverted tend to be properly led more than extraverted ones. That the determination of temperament is better done by synthesis of observations of others than by self-observation is stressed.—*R. Kuroda* (Keijo).

5214. **Klages, L.** *Konstitution und Naturell.* (Constitution and temper.) In: *Kreusch, Praktische Graphologie für das tägliche Leben.* Berlin: 1935. Pp. 7-12.—The term *temper* refers to external manifestations of the inner life, while the term *character* refers to the inner life itself. The concept of *constitution* denotes the bodily manifestations of the psyche in general. The temper is a part of the constitution. The character expresses itself in the temper in a form that can be interpreted. An important concept is the "threshold of expression." The higher this threshold, the more hidden is the character behind it. From this fact some graphological misinterpretations result, which the author demonstrates on three examples.—*P. Klimpel* (Leipzig).

5215. **Kreusch, M. v.** *Wirtschafts-Characterologie.* (Economic characterology.) In: *Kreusch, Praktische Graphologie für das tägliche Leben.* Berlin: 1935. Pp. 13-23.—The significance of some character traits—like decision, energy, quarrelsomeness—for various occupations is evaluated.—*P. Klimpel* (Leipzig).

5216. **Maller, J. B.** *Conflict test.* For the measurement of ethical judgment and self-evaluation. New York: Columbia University. (Mimeographed

form.)—The test purports to study (1) children's judgments in problems involving ethical conflicts, and (2) children's evaluations of their own behavior in terms of their own standards. Ethical judgment and self-evaluation scores are obtained on the basis of responses to problems of conflict. Reliability (odd-even items) is .85. Validity is determined by opinions of educators and graduate students.—*R. Goldman* (Clark).

5217. **Maller, J. B.** *Character sketches. A test for the measurement of personality adjustment.* New York: Columbia University, 1932.—The 200 items of the test are presented in two booklets, Part I and Part II. Each series of 100 descriptions is composed of six subtests which may be scored independently: habit pattern, self-control, social adjustment, personal adjustment, mental health, and readiness to confide. Consistency scores can also be obtained. The questions are presented in the form of impersonal descriptions of other people, and the subject indicates whether he feels or acts the same or different. Each question is stated twice, positively and negatively. The reliability (odd-even items) is .95. The sketches are designed for use with any subject beyond the fifth grade.—*R. Goldman* (Clark).

5218. **Maller, J. B.** *Character and personality tests.* *Psychol. Bull.*, 1935, 32, 500-523.—A review of tests and studies appearing during 1935, organized under the following heads: summaries and reviews; self-description tests (especially the Bernreuter); indirect measures of personality adjustment (especially the Rorschach); measures of attitudes and interests (especially methods of Thurstone and Strong); aptitude, appreciation, and background; techniques involving behavior; rating scales; observations; physical indices; expressive movements and work patterns; and analyses of personality (statistical and characterological).—*J. F. Dashiell* (North Carolina).

5219. **Miller, R.** *Der seelische Aufbau der Persönlichkeit.* (The psychic structure of the personality.) Potsdam-Berlin: Müller & Kiepenheuer, 1934. Pp. 207. RM. 6.80.—Miller rejects vitalism and presents a biological concept, new in some aspects, according to which the psychic is from the beginning identical with life. The human psyche is understood only through phylogeny, and it parallels organic complexity and differentiation. The path to the psyche is through the soul of the cell and the organ, which have supraconscious, subconscious and unconscious levels. The discussion includes the conscious and vegetative egos, splitting of consciousness, instincts, intellect, genius, occult phenomena, degeneration and constitution. A world-view is ultimately deduced.—*R. Miller* (Freising).

5220. **Moran, T. F.** *A brief study of the validity of a neurotic inventory.* *J. appl. Psychol.*, 1935, 19, 180-188.—A modified form of 50 items, most of which are adapted from the Thurstone neurotic inventory, shows no differentiation between a group of 146 "adjusted" and 41 "known neurotic" students at the University of Buffalo. The responses to the three categories used, for both groups combined, in

this questionnaire are as follows: 86% "little or no worry," 12% "disturb me moderately," and 1% "continuous and frequent anxiety."—*R. S. Schultz* (Psychological Corporation).

5221. Popp, W. *Charakterforschung und Psychologie*. (Study of character and psychology.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 16-26.—Common understanding of people as a primitive form of characterology is based to a large extent on the judgment of actions and attitudes of the individual. Since not every action is a true expression of character and since the character itself is many-sided, it was necessary to look for more reliable indicators of character traits. Thus empirical characterology originated. To build up a true science of characterology it is necessary that the students in this field be psychologically oriented.—*P. Klimpel* (Leipzig).

5222. Spearman, C. *Oproep tot samenwerking inzake persoonlijkheidsanalyse*. (Challenge to co-operation in the field of analysis of personality.) *Ned. Tijdschr. Psychol.*, 1933, 1, 289-297.—(Not seen.)—*H. Beaumont* (Kentucky).

5223. Stern, W. *On the nature and structure of character*. *Character & Pers.*, 1935, 3, 270-289.—According to Stern, character is not only a unity but unity in a multiplicity (*unitas multiplex*). It is very difficult to bring totality and analysis into the proper relation with each other. However, the will element in character seems to provide the avenue of approach to analysis. From this standpoint, character traits and types may be divided into three classes. The first is the *telic*, which may be subdivided into the *autotelic* and the *heterotelic*. The autotelic concerns those articulations of disposition which progress toward self-development. The heterotelic may be classified as to the different kinds of outside goals to be realized: (1) the *hypertelos*, or the super-personal regions of existence to which the individual belongs; (2) the *syntelos*, or other persons who receive recognition and consideration as of significance for the self; and (3) the *ideotelos*, or a system of abstract ideas, ideals and principles which function in a normative way. The second class of character traits and types is the dynamic, that is, those acts which are fed by the reservoir of the urge life. These may be either positive or negative. The third class is the *structural*. However, it must be remembered here that character is a matter of total texture displaying certain *formal* peculiarities. These features are total, not partial features, as was formerly held.—*M. O. Wilson* (Oklahoma).

5224. Thorndike, E. L., & others. *Adult interests*. New York: Macmillan, 1935. Pp. ix + 265. \$3.25.—A statement of the main results of experiments carried out in conjunction with the staff of the Institute of Educational Research of Teachers' College, on changes in the intensity of interests with age, on the possibility of modifying and improving interests in adults, and on the means and methods of doing this effectively. Individual differences in interests among adults and differences between young and old are also discussed. The book is intended for those

interested in adult education. Various appendices and index.—*D. Shakow* (Worcester State Hospital).

5225. Tramm, K. A. *Psychotechnik und Charakterologie*. (Psychotechnics and characterology.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 27-32.—Efficiency of work is largely dependent on character, its tendencies, instincts, impulses, etc. Therefore it would be advisable to make more use of characterological findings in psychotechnics. With regard to the use of tools, character plays no role, but it is of great importance for adaptation to environmental conditions in the workshop. The application of the psychiatric-biological investigations of Kretschmer, Piderit and Kirchhoff open quite new possibilities in this field. Characterology could be successfully applied in psychotechnical examinations. Also the application of graphology would be useful.—*P. Klimpel* (Leipzig).

5226. Washburne, J. N. *A test of social judgment*. *J. appl. Psychol.*, 1935, 19, 125-144.—Data are presented on a questionnaire form for social judgment, most suitable above the age of twelve. It aims to measure purpose, "socialness," sympathy, poise, and impulse-judgment. These characteristics have low intercorrelations. The retest reliability for a college group was found to be .92. Validation based on contrasting groups of adjusted and maladjusted groups yields biserial correlations of .90.—*R. S. Schultz* (Psychological Corporation).

5227. Wittlich, B. *Persönlichkeitswert und Handschrift*. (The value of personality and the handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 49-58.—Between the form level of the handwriting as Klages defines it—as the degree of originality and expressiveness—and the value of the personality certain relations can be found. A high form level can result from an elementary, powerful personality, but also from an inner conflict which becomes conscious. In the first case the harmony arises from the unity of basic inner qualities, in the latter case this harmony has to be reached by struggle. Therefore the latter does not attain the overpowering immediacy (i.e., the form level) of the handwriting of original personalities.—*P. Klimpel* (Leipzig).

[See also abstracts 5076, 5123, 5292.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

5228. [Anon.] *Bibliography on education in family life, marriage, parenthood, and young people's relationships*. New York: Fed. Coun. Churches & Int. Coun. relig. Educ., 1935. Pp. 31. \$.10.—*R. R. Willoughby* (Clark).

5229. [Anon.] *Students' dissertations in sociology*. *Amer. J. Sociol.*, 1935, 41, 67-100.—The editors of the *American Journal of Sociology* have compiled an extensive list of doctoral dissertations and masters' theses in preparation in universities and colleges in the United States and Canada from returns from letters to departments of sociology. The following subjects are of particular psychological interest,

(1) Doctoral dissertations: (Buffalo) juvenile delinquency in Buffalo, 1930-32; (Chicago) attitudes toward crime in Soviet Russia, a community delinquency index, development of personality traits, personality disorganization and domestic discord, delinquency triangles, Kokutai, leadership among negroes, negro morality, mutability of personality traits, the only child, prediction tables for embezzlers, propaganda and social control, social conditioning of curiosity, race conflicts in the south, songs as forms of expressive behavior, and juvenile delinquency in relation to family background, success and failure, and urban-rural influences; (Columbia) age in social relations, leadership, personality factors in social conflict, the social research laboratory, the social theory of J. M. Baldwin, suicide in Massachusetts, and revolution as a type of social movement; (Cornell) family relations and students' autobiographies; (Duke) emotional factors in social process; (Harvard) foci and shifts of attention in intellectual development; (Minnesota) member roles in families of delinquents, and social adjustment in college students; (New York University) play activities and character, leisure time activities of normal and psychotic personalities, social role of motion pictures, education and social planning, children's maladjustments in the Soviet Union, behavior maladjustments in a secondary-school population, the homosexual personality, psychological study of married and unmarried mothers, studies on continuation schoolboys, and the present status of instinct in psychology; (Northwestern) technique for developing criteria of parole ability; (Southern California) behavior problems of junior college women, and adjustment problems of Mexicans in southern California; (Utah State Agricultural College) urban-rural influences and juvenile delinquency; (Vanderbilt) high-school failures; (Washington University) children's descriptions of their parents' personalities, reaction of children to humorous pictures, and religion and adjustment behavior; (Wisconsin) psychoanalysis in relation to sociology and social psychology, morality attitudes, rural-urban variations in criminals, and comparative studies on property offenders; and (Yale) utilization of scientific principles by primitive people, and Sibirak folkways. (2) Masters' theses: (Chicago) environmental factors and human behavior tendencies, behavior changes, motion pictures and delinquency, social control in a summer camp, the social nature of day-dreaming, and ecological studies of mental diseases; (Clark) social forces and juvenile delinquency; (Columbia) cultural adjustment of the West Indian and southern negro, family morale in home relief work, the visiting teacher and the problem child, and the social aspects of mental hygiene; (Loyola) social adjustment of students; (Michigan) family discipline and juvenile delinquency; (Minnesota) social adjustment of the college student; (New York University) cultural adjustment of the Chinese-American girl, and sex conflicts in adolescence; (Southern California) various studies in juvenile delinquency, child behavior problems, social consequences of unemployment, problem complexes in welfare cases, the handicapped girl in industry,

slow-learning pupils, the unadjusted high-school student, adjustment in dementia praecox, and war experiences and mental disease; (Stanford) socio-psychological consequences of the spread between ideology and reality; (Vanderbilt) the criminal insane, and ecological studies of delinquency; (Virginia) marriage happiness; (Washington University) emotion and learning; and (Wisconsin) a Freudian interpretation of crime.—A. B. Hunter (Clark).

5230. Bachmann, A. Zur psychologischen Theorie des sprachlichen Bedeutungswandels. (The psychological theory of linguistic semantic change.) *Arch. EntwPsychol.*, 1935, 15. Pp. 68.—The aim of the study is to formulate the psychological principles which govern changes in verbal meanings. After such general concepts as "verbal meaning" and "semantic change" are clarified, the effects of complex-qualities and valuations are considered. The second section deals with transfer of meaning; here a totalizing type of experience and affective experiences appear to be important mental bases. Through a study of functional interconnections, the writer attempts to show the psychological necessity of the forms of semantic change and transfer of meaning. Finally, emphasis is laid upon the place of a psychological theory of semantic change in genetic social psychology.—A. Bachmann (Leipzig).

5231. Bennett, W. C., Zingg, R. M. The Tarahumara, an Indian tribe of northern Mexico. Chicago: Univ. Chicago Press, 1935. Pp. 431. \$4.00.—(Not seen).

5232. Bergson, H. L. The two sources of morality and religion. (Trans. by R. A. Audra & others.) New York: Holt, 1935. Pp. 316. \$3.00.—R. R. Willoughby (Clark).

5233. Bianchi, L. Contributo alla morfologia del cervello degli Zulu. (A contribution to the morphology of the brain of the Zulu.) *Arch. ital. Anat. Embriol.*, 1934, 33, 518-666.—Anatomic illustrations of nine brains of adult Zulus, seven men and two women.—G. M. Hirsch (Rome).

5234. Bond, G. L. The auditory and speech characteristics of poor readers. *Teach. Coll. Contrib. Educ.*, 1935. No. 657. Pp. 48.—An experimental group of 64 poor readers (retarded one-half year in grade 2 or one year in grade 3) was compared, in regard to auditory and speech characteristics, with a control group matched in IQ (Stanford-Binet), age, schooling, and sex. The groups were further classified according to the way they had been taught to read as an oral-phonetic group and a "look-and-say" (non-phonetic) group. The poor readers were low in auditory acuity, blending, auditory perception techniques, and memory of digits. The differences (except memory of digits) between good and poor readers who were taught by the phonetic method were greater than for those taught by the look-and-say method. No difference in incidence of speech defects was discovered between good and poor readers in any of the categories. Auditory ability appears to be a factor of importance in relation to reading disability if an oral-phonetic type of instruction is used. The bibliography

lists 21 titles. (See IX: 5248.)—J. M. Stalnaker (Chicago).

5235. Brachfeld, O. *El problema del plurilingüismo ante la psicología.* (Plurilingualism as a psychological problem.) *Rev. Psicol. Pedag.*, 1934, 2, 32-53.—This is an attempt at synthesis, with stress on the emotional factors. The foreign-language problem is becoming increasingly important under present world conditions, and the polyglot of today is the precursor of an epoch when there will be a certain linguistic unification. Brachfeld discusses the criteria of plurilingualism, its influence on the personality, and methods of teaching foreign languages. Plurilingualism modifies the personality in the directions of increased function and greater refinement. The person learning a foreign language experiences the same inhibitions and inferiority feelings as the young child in passing from the bipersonal language used by himself and his mother to the common tongue. Most psychologists who have devoted attention to methods of teaching foreign languages have lost themselves in the problems of psychotechnics and aptitude. The majority of vocabulary tests are so primitive and insufficient as to be useless, and their elaboration is a waste of effort. The problem is poorly conceived. Its solutions lie not in tests and rationalizing methods but in psychoanalysis, Adler's and Gestalt psychology, and the new studies of aphasia (Goldstein and Gelb) which have a revolutionary bearing on the pathology of plurilingualism.—M. E. Morse (Baltimore).

5236. Bracken, H. v. *Die Konstanz der Handschrifteneigenart bei Kindern der ersten vier Schuljahre.* (Constancy of handwriting peculiarities in children in the first four grades.) *Ned. Tijdschr. Psychol.*, 1933, 1.—(Not seen.)—H. Beaumont (Kentucky).

5237. Brentano, F. *Vom Ursprung sittlicher Erkenntnis.* (The origin of moral judgment.) Leipzig: Meiner, 1934. Pp. 174. RM. 2.50; 3.30.—This is the third edition of Brentano's work, edited by Kraus and augmented by a chapter on love and hatred, published here for the first time. The modern objectivistic theory of values would not be possible without this study of Brentano's. In referring back to the intention behind objective facts he has established a synthesis between Protagoras and Plato. Brentano considers the subjective consciousness his starting point, but follows Plato and Aristotle in pointing out the importance of emotion in determining "right" or "wrong," giving this evaluation general validity.—F. Meiner (Leipzig).

5238. Bühler, K. *Sprachtheorie.* (Theory of language.) Jena: Fischer, 1934. Pp. 434. RM. 20.—In the first part of the book four basic thoughts are developed: (1) language serves the speaker as a means of expression, appeal to the audience and description of situations; (2) language is symbolic, as only certain abstractions are relevant to its function; (3) language must be described as the actual activity of speaking, as language mechanism, as speech act and as a product of speech; (4) language is a lexicological as well as a syntactic system. The second part discusses the indicated function of language. It uses the per-

ceptual and conceptual fields to indicate definitely the speaker, audience and topic. The third part indicates the importance of the symbolic function of language, in which the relationship between situation and symbol is as definitely prescribed as it is in musical copy. The structure of the mechanism of language is taken up in the fourth part. In progressive synthesis language develops new functions in four steps: sound, word, sentence, paragraph. The author maintains that a synthetic approach to language as offered in the last part is as essential and based on the same axiomatic presumptions as the analytic approach of the preceding parts.—K. Bühler (Vienna).

5239. Calhoon, C. H. *Ohio's responsibility to youthful offenders.* *Quar. Bull. Mgng Off. Ass. Ohio Dep. publ. Welf.*, 1935, 12, No. 1, 13-19.—It is the purpose of the juvenile court and other agencies dealing with delinquent children to determine the general condition and character of a child and to formulate a plan of treatment which will meet the specific needs of the child. No effective remedial program can be outlined until the causes of the maladjustment have been isolated. Physical, psychological and social factors must be considered. A state-wide system of behavior clinics and school clinics as diagnostic centers is advocated. The employment of diagnostic teachers and visiting teachers in the schools is an effective measure for the prevention of delinquency resulting from many types of home and school maladjustments.—R. M. Stogdill (Columbus).

5240. Carrara, M. *L'antropologia criminale e la "analogia" nel diritto penale. Il crepuscolo dei Codici?* (Criminal anthropology and "analogy" in penal law. The twilight of codes?) *Arch. Antrop. crim.*, 1934, 54, 671-691.—G. M. Hirsch (Roma).

5241. Clauss, L. F. *Rassenseele und Volksgemeinschaft.* (The racial soul and folk unity.) *Rasse*, 1935, 2, 3-19.—The idea of race connotes, in distinction from anatomical limitations, a transcendent fateful unity of body and soul. Each race bears within itself its own world of values and measures. Only a homogeneous people can have the same fate and experience. Hence the racial soul in each individual can be cultivated, i.e. impressed with an ever repeated definition and affirmation of this fate.—P. Krieger (Leipzig).

5242. Dashiell, J. F. *Experimental studies of the influence of social situations on the behavior of individual human adults.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 1097-1158.—The author presents a survey of the experimental inquiries in the field indicated, regarding the general method of experiment in this field as involving "in essence a comparison between measured achievements of the individual person when under influences from other persons physically present with the measured achievements (in identical functions) of the same individual when working alone." The studies considered deal with the effect upon the individual's performance (work, judgment, opinion, report) of spectators or auditors, co-workers, competition, social encouragement and

discouragement, group discussion, inclusion (of report) in a social chain or series of reporters, majority opinion, and expert opinion. Bibliography.—E. Heidebreder (Wellesley).

5243. Deborin, A. M. *Novoe uchenie o yazyke i dialekticheskiy materializm.* (A new theory of language and dialectic materialism.) *Akad. Nauk XLV N. Ya. Marru*, 1935, 21-73.—Marr's new theory of language and thinking is in complete agreement with dialectic materialism. Language developed from gestures. Sign language originated as a woman's language in matriarchal civilizations and depended on the role of the hand as a primitive tool. Language and thinking were one, but gradually the tool became cause and the product effect, so that language became a form of thinking and thinking the content of language. General and abstract ideas first occurred when sound-language developed and artificial tools were used. The polysemantic word gradually is split into two which express opposite ideas (in Armenian the same word is used for soul as for body). In the age of primitive communism the synthetic structure of language develops, and later, with the differentiation of labor and the beginning of occupational grouping, occur the development of sentences, changes of meaning, etc. Class distinction and technical division of labor occur simultaneously with inflection in language.—E. Kagarov (Leningrad).

5244. Dunbar, H. F. *Mental hygiene and religious teaching.* *Ment. Hyg., N. Y.*, 1935, 19, 353-372.—The clergyman is in some degree responsible for the mental hygiene of his community. Clergymen accordingly need more practical training in handling human problems. Inasmuch as the primary task of the teaching of religion is concerned with "a way of life," the general hygiene of his pupils' lives is predetermined by teachers of religion. For this reason teachers of religion should study the development of the emotional life. They should then emphasize in their teaching those concepts which make for adult behavior rather than those fostering infantile patterns of behavior.—H. S. Clapp (Grasslands Hospital, Valhalla, N. Y.).

5245. Eliasberg, W. *Zur Psychologie der Korruption.* (Psychology of corruption.) *Ned. Tijdschr. Psychol.*, 1933, 1, 335-384.—(Not seen.)—H. Beaumont (Kentucky).

5246. Esper, E. A. *Language.* In *A Handbook of Social Psychology.* Worcester, Mass.: Clark University Press, 1935. Pp. 417-460.—Students interested primarily in language, not in the nature of consciousness, have found it profitable in general to consider speech as a mode of action, rather than as a counter-sign of thought, inquiring into the functional relationships into which language enters (e.g. communication, the mediation of human cooperation, the "conceptualizing" of perception) and attempting a survey looking toward an empirical analysis of the conditions which determine its characteristics and forms. Approaching the problem from this point of view, the author discusses the following topics: language and ethnology, the "signaling" behavior of animals, the

acquisition of language by the child, the role of language in behavior organization and control, and derivative uses of language. Bibliography.—E. Heidebreder (Wellesley).

5247. Evans-Pritchard, E. E., Firth, R., Malinowski, B., & Schapera, I. [Eds.] *Essays presented to C. G. Seligman.* London: Kegan Paul, 1934. Pp. vi + 385.—This volume, containing papers by various authors, represents modern anthropology and is issued in tribute to Seligman's share in the development of anthropological science. Among the contributors are Marie Bonaparte on the question of psychoanalytic anthropology from a general point of view; Geza Róheim on "The Study of Character Development and the Ontogenetic Theory of Culture"; B. Z. Seligman on "The Part of the Unconscious in Social Heritage"; M. I. Herskovits on "Freudian Mechanisms in Primitive Negro Psychology"; R. R. Marett on "Food Rites"; E. E. Evans-Pritchard on "Zande Therapeutics"; A. I. Richards on "Mother Right Among the Central Bantu"; I. Schapera on "Oral Sorcery Among the Natives of Bechuanaland"; F. E. Williams on "The Vailala Madness in Retrospect"; and L. K. Tao on "Some Chinese Characteristics in the Light of the Chinese Family."—M. H. Erickson (Eloise Hospital).

5248. Fendrick, P. *Visual characteristics of poor readers.* *Teach. Coll. Contrib. Educ.*, 1935, No. 656. Pp. 54.—An experimental group of 64 poor readers (retarded one-half year in grade 2 or one year in grade 3) was compared in regard to certain visual characteristics with a control group matched in IQ (Stanford-Binet), age, schooling, and sex. The groups were further classified according to the method by which they were taught to read, as oral-phonetic or look-and-say. Poor readers were poorer in visual acuity. When the poor readers taught by the look-and-say method were compared with good readers taught by the same method, the difference was greater. No difference in lateral eye-muscle coordination, or in particular dominance in eyedness or handedness was found. Optometrical examinations showed that 70% of the good readers and 56% of the poor readers had normal vision. Visual ability appears to be a factor of importance in relation to reading disability if a look-and-say (non-phonetic) type of instruction is used. The bibliography lists 34 titles. (See IX: 5234.)—J. M. Stalnaker (Chicago).

5249. Frazer, J. G. *Creation and evolution in primitive cosmogonies, and other pieces.* London: Macmillan, 1935. Pp. xii + 152. 8/6.—Eight essays. The first examines the cosmogonies of primitive peoples throughout the world. The other pieces are personal and literary.—F. C. Bartlett (Cambridge, England).

5250. Fritz, —. *Pyromanie, Selbstentzündung und andere Brandursachen.* (Pyromania, setting fire to one's own property, and other causes of conflagrations.) *Arch. Kriminol.*, 1935, 96, 209-222.—An analysis of the eleven fires occurring in a certain rural district during 1934 reveals that three were set by a feeble-minded woman. The motive in two cases was revenge for insults. She also set fire to her

parents' house, saying that the act was accompanied by a pleasurable vision of the Virgin and Saint John. Fritz notes that incendiarism is increasing during recent years.—*M. E. Morse* (Baltimore).

5251. **Furfey, P. H.** *A foreword to sociology.* *New Scholast.*, 1935, 9, 187-208.—Scientific generalization is possible in sociology, but falls short of being practically useful. The sociologist must choose between two unattractive alternatives, (1) to admit that sociology covers a very limited field and can be of no practical value, or (2) to discard scientific certainty and approach the problems of contemporary life with the admission that our conclusions are only probable. The second alternative makes it possible for sociology to be of some use, but we run the risk of erecting our own prejudices into dogmas. Sociology differs from many other sciences in that progress is partly dependent upon character. Modern psychiatry has shown that some subtle selfishness always underlies rationalizations that warp the individual's judgment. Intense attachment to the interest of one's own class or nation prevents clear thinking. The sociologist may trust his judgments under two conditions: (1) he must have a good background of expert knowledge; (2) he must cleanse his heart of hatred and approach the problem with naive sympathy for all humanity.—*M. F. Martin* (West Springfield, Mass.)

5252. **Gates, A. I.** *The improvement of reading.* (Rev. ed.) New York: Macmillan, 1935. Pp. 668. \$2.50.—In revising this reading manual of diagnostic and remedial methods the author has incorporated the results of continuous research by himself and others since the time of its first publication in 1927. It is a source book for both psychological and educational diagnosticians and for teachers who engage in remedial work. Directions are given for diagnosing and correcting all types and degrees of reading defects in children of the first eight grades. The diagnostic program includes much new material; it proceeds from the group survey to the intensive individual examination. Emphasis is now placed upon producing an inventory of the capacities and techniques involved in reading. Thirty-seven tables of norms for the diagnostic tests are included. These are more significant than the former norms and are also more easily interpreted. A wealth of material for use in remedial instruction is offered. A book list for children which has proved to be useful in remedial instruction and an up-to-date bibliography of diagnostic and remedial work in reading are part of the appendix.—*M. W. Kuensel* (Children's Home, Cincinnati).

5253. **Gerstner, H.** *Nachweis körperlicher Krankheiten in der Handschrift.* (Signs of organic diseases in the handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben.* Berlin: 1935. Pp. 51-54.—At present it is not yet possible to indicate definite graphological signs of organic diseases, but there are certain correlations between single symptoms and graphological peculiarities. The author found five such correlations, which are briefly discussed.—*P. Klimpel* (Leipzig).

5254. **Glueck, B.** *Criteria for estimating the value of psychiatric service in the field of criminology.* *Amer. J. Psychiat.*, 1934, 91, 693-705.—The psy-

chiatric aspects of contacts with delinquents are discussed, with emphasis on the lack of justification of the use of the word "treatment" in *One Thousand Juvenile Delinquents—Their Treatment by Court and Clinic* by Sheldon and Eleanor Glueck. It is suggested that if psychiatric treatment had been given the conclusions of the Gluecks' book would have been different.—*R. Goldman* (Clark).

5255. **Goertheim, H. O.** *Hat die gerichtliche Schriftvergleichung wissenschaftliche Grundlagen?* (Has the judicial comparison of handwritings a scientific basis?) In: Kreusch, *Praktische Graphologie für das tägliche Leben.* Berlin: 1935. Pp. 59-63.—The recognition or identification of handwritings must be based on scientific principles as valid as those for the recognition and identification of persons. Here too one has to deal with primary signs of distinction of a unique nature and with secondary signs of a general nature. Primary signs of distinction which are far from the mean are very rare, but if they are found they can be regarded as decisive evidence, while secondary signs have then a value only if the resulting complex of evidence has an unusually articulated structure. The validity of the evidence increases with the number and quality of the single signs.—*P. Klimpel* (Leipzig).

5256. **Gottschick, J.** *Grundfragen und Schwierigkeiten der Rassenpsychologie.* (Basic problems and difficulties of racial psychology.) *Z. psych. Hyg.*, 1935, 8, 2-11.—Following W. Scheidt, Gottschick speaks in terms of a new "biological" psychology, which can be the only true racial psychology. He considers that all psychic manifestations are dependent on bodily processes.—*P. Krieger* (Leipzig).

5257. **Gray, W. S., & Leary, B. E.** *What makes a book readable.* Chicago: Univ. Chicago Press, 1935. Pp. xviii + 358. \$3.00.—Opinions of librarians, publishers and teachers of adults as to what makes a book readable are classified under four categories, in order of importance: factors of content; style; format; and general organization. Two methods of estimating difficulty are developed, first by a comparative count of significant elements of difficulty (syllabic sentence length, number of simple sentences, number of monosyllables, percentage of different words) occurring in different material, and second by use of the average reading score. Representative groups tested for reading ability show one-third ranking below grade 5, less than half as high as grade 8, and one-sixth equal to high school graduates. The mean rank is 7.8. 350 general books are analyzed for difficulty, the scores approximating a normal curve from very easy to very difficult. An intensive study is made of 68 magazines, 29 books, and 15 newspapers to determine their index of difficulty. There is clearly a lack of material interesting to adults and yet within the grasp of the unskilled reader. Other factors than difficulty evidently determine readability for the highly skilled reader. Additional statistical interpretation of the data is developed in an extensive appendix.—*M. P. Montgomery* (Faribault, Minn.)

5258. **Growdon, C. H., & Calhoun, C. H.** *An analysis of cases admitted to the Boys' Industrial*

School and the Girls' Industrial School during the year 1931. *Quart. Bull. Mgng Off. Ass. Ohio Dep. publ. Welf.*, 1933, 10, No. 4, 6-14.—Psychological examination of 1104 admissions to the Boys' Industrial School in 1931 indicates that 309 of these boys could be better cared for elsewhere. These misfits were classified as follows: feeble-minded, 6.8%; defective delinquents, 14.3%; psychotic, 0.3%; need foster homes, 0.8%; reformatory type, 5.6%. Of 313 girls admitted to the Girls' Industrial School, 17.5% were classified as feeble-minded; 4.7% as defective delinquents; 1.2% as psychotic; 2.3% as needing foster homes; and 1.2% as reformatory type. The industrial schools are not equipped to give these children the training they need.—*R. M. Stogdill* (Columbus).

5259. Gruenberg, B. C. *Science and the public mind*. New York, London: McGraw-Hill, 1935. Pp. 196. \$2.00.—*R. R. Willoughby* (Clark).

5260. Hambly, W. D. *Tribal initiation of boys in Angola*. *Amer. Anthropol.*, 1935, 37, 36-40.—This is a comparative study of initiation rites from several distinct centers of Angola culture. Despite local differences certain essentials are common to all, viz., the basic distinction between the circumcised and the uncircumcised, seclusion, harsh treatment, instruction in dancing and tribal customs, fabrication of masks and costumes, and rigorous exclusion of women and the uninitiated. In general the idea of death and rebirth is emphasized, there is a change of name, and there is often a special language in archaic dialect for the novices. The age of initiation varies widely. The above refers to boys, and Hambly suggests that the initiation rites of girls may be one of the most important subjects for future research.—*C. M. Diserens* (Cincinnati).

5261. Harman, N. B. *Science and religion*. London: Allen & Unwin, 1935. Pp. 175. 5/-.—A book written by a leading physician to justify his view that a modern man of science "could not be or wish to be other than a religious man."—*F. C. Bartlett* (Cambridge, England).

5262. Harvey, E. D. *The social history of the yellow man*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 361-414.—The author traces the social history of those groups of the yellow race which have contributed most notably to the stream of world culture: the Chinese, the Koreans, and the Japanese. In his concluding comments on the skill and ingenuity of the yellow races in manipulating the opportunities of their environment, he says: "They were able, in many ages and in varying degree, to satisfy the major human interests for a population which was always growing numerically. . . . Eventually (they) went far beyond the primal satisfactions of hunger and love . . . to the creation of all the fine arts. . . . At present the mantle of leadership in East Asia has fallen on the Japanese. . . . Eastern Asia is already on the up-swing into a new cycle of growth, impelled thereto by the science of the West, as mediated to its peoples in large part by the people of the 'Rising Sun.'" Bibliography.—*E. Heidbreder* (Wellesley).

5263. Hay, D. G. *Measurement of attitudes of an audience*. *Sch. & Soc.*, 1935, 41, 543.—Before and after listening to a debate on a question of governmental policy, 22 individuals took an attitude test which dealt with the issue. The attitude scale used was made after the pattern devised by L. L. Thurstone. A slight insignificant shift in attitude toward a more liberal stand was apparently a result of the debate.—*H. L. Koch* (Chicago).

5264. Haynes, F. E. *Criminology*. (2nd ed.) New York: McGraw-Hill, 1935. Pp. 497. \$3.75.—This textbook makes a survey of the field of criminology from an objective point of view. Comparisons are drawn between past and present methods, modern approaches to various aspects of the problem are elaborated, recent developments are described, and recent significant studies are quoted. Each chapter is elaborated in accordance with subheadings of the general topic. The chapter headings are: (1) social responsibility for crime; (2) the scientific study of the criminal; (3) the individual delinquent; (4) types of criminals; (5) crime and social control—the police; (6) criminal law and procedure; (7) juvenile offenders; (8) the evolution of penology; (9) the jail system; (10) prisons in the United States; (11) reformatory; (12) inmate participation in prison administration; (13) prison labor; (14) parole and release from prison; (15) probation; (16) prevention. To each chapter are appended lists of review questions, topics for investigation, and selected references. The book is indexed.—*M. H. Erickson* (Eloise Hospital).

5265. Heckel, B., & Quick, G. *The Yao tribe; their culture and education: arts and crafts in the training of Bemba youth*. New York: Oxford Univ. Press, 1935. Pp. 53. \$.75.—(Not seen).

5266. Heinitz, W. *Zweiter Bericht der "Gesellschaft zur wissenschaftlichen Erforschung musikalischer Bewegungsprobleme"*. (Second report of the "Society for the scientific investigation of the problems of musical movements.") *Vox*, 1934, 20, No. 5/6, 120-123.—This contribution from the Phonetic Laboratory of Hamburg University consists of 35 questions directed to working out a "physiological reaction-profile" and grading certain elements of musical style according to their accent (with the aid of canons). In every discussion of the "movement situation" the same attitude toward the interpretation is essential, since the cause of divergent reactions is often an unconscious compensation based on a different interpretative treatment. Among the chief characteristics of style are the respiratory type and curve of inflection, placement of tension, static or kinetic, diminuendo, type and rounding out of muscular action, weight, mass, hand-position, attack, and relationships to the size of the body.—*P. Krieger* (Leipzig).

5267. Herskovits, M. J. *Social history of the negro*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 207-267.—The social history of the negro race presents something approximating a laboratory situation for the study of acculturation and of the vitality of social behavior patterns. On the African continent, internal

migrations of peoples and cultural contacts that can only be conjectured have made for the several types of social behavior found in the various cultural areas. In the new world, the negroes, deriving in large measure from a rather restricted African region, welded their historical experiences into a series of culture patterns that reflect their historical background. A study of the retention and change of these culture patterns indicates not only that Africanisms have shown considerable vitality in the new world, but also that there has been a mutual give and take between African customs and those of the whites with whom the negroes came in contact. Bibliography.—E. Heidbreder (Wellesley).

5268. Hocke, F. *Sinnlichkeit und Erotik in der Handschrift*. (Sensuality and eroticism in handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 40-45.—The sensual individual who looks only for the body of his mate has a feeble will power, while the erotic, the "soul-seeker," has a very pronounced strength of will. The graphological expression of strength of will is regularity, strong pressure, angular connection. The signs of lack of will power are irregularity, feeble pressure, linear connection. Also the position of writing, holding of the pen, *Formniveau*, etc., are significant.—P. Klimpel (Leipzig).

5269. Krekel, H. *De crisis in het moderne leven*. (The crisis in modern life.) *Ned. Tijdschr. Psychol.*, 1933, 1, 315-330.—(Not seen.)—H. Beaumont (Kentucky).

5270. Kreusch, M. v. *Charakterforscher*. (Students of characterology.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 3-10.—As an introduction to the collected papers on practical graphology the author gives a short chronological survey of the most important students of graphology. Adolf Henze (Leipzig 1860) studied the problems in a rather intuitive way. The first scientific attempts were made by Michon, Crépiaux-Jamin, Langenbruch, Preyer, and Busse, but the founder of a truly scientific graphology was Klages.—P. Klimpel (Leipzig).

5271. Kreusch, M. v. *Äusserung der Linksbeziehung in der Handschrift*. (Manifestations of left preference in handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 33-39.—The finding of Wilhelm Fliess, according to which the left side of the body is bound up with traits of the opposite sex, should be checked by graphological methods. The author found certain complexes of graphological traits of left preference consisting of 14 traits for male, and of 4 traits for female persons. Though these traits are contemporaneously present only in rare cases, single traits and varying combinations of these traits were found very often.—P. Klimpel (Leipzig).

5272. Kurth, B. *Handschrift und Todesalter*. (Handwriting and age at death.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 43-48.—The author, an insurance expert, investigates the problem whether traits of character have an influence on the length of life. Every trait

of the handwriting was determined on a mathematical-geometrical basis. 10,000 applications for insurance were examined with regard to height, breadth, pressure, regularity, and difference of lengths. The results were as follows: The higher the small letters and the broader the handwriting the earlier the date of death. Persons with no pressure in the handwriting have a lower average length of life than those with stronger pressure; regularity of the handwriting and a not very great difference in lengths show a correlation with late date of death, while irregularity of handwriting with strong differences in lengths correlates with a very early death.—P. Klimpel (Leipzig).

5273. Liebig, C. *Die Frau als Ehemann*. (Woman as husband.) *Krim. Mh.*, 1935, 9, 131-133.—An account, exclusively from the police standpoint, of an anatomically and physiologically normal woman about 35 years old who two years previously had been married in the Catholic Church to a woman. "His" account of his past was probably false, and the police could find no birth certificate or any information about him until his nineteenth year. It was proved by fingerprints that he was then working as a maid and was arrested for stealing a man-servant's livery. Six years later he was working as a laborer, and his friends had no suspicion that he was not a man. He became acquainted with his future wife at this time. The matter finally reached the police because of his threats against his wife if she revealed the situation. His contention was that he believed himself a hermaphrodite and that the woman had married him knowing the condition. He had never sought medical advice or spoken of the matter because of shame.—M. E. Morse (Baltimore).

5274. Long, H. H. *Some psychogenic hazards of segregated education of negroes*. *J. Negro Educ.*, 1935, 4, 336-350.—Segregated schools create or largely contribute to the problems considered by this article. The concept of segregation is clarified by definition, by opinions among negroes, by studying the underlying causes and by summarizing researches on this problem. Non-material hazards are carefully examined. Segregation limits the incentive of the negro. The influence of segregation upon feelings of inferiority and feelings of superiority is discussed in some detail. Racial self-appreciation is discouraged by segregation. Moreover, segregation is contrary to the democratic ideal. Pupils should be differentiated on the basis of their abilities. The individual and not the group should be the unit of differentiation.—H. S. Clapp (Grasslands Hospital, Valhalla, N. Y.).

5275. Megrelidze, K. R. *O khodyachikh sueveriyakh i pralogicheskoy sposobe myshleniya*. (Contemporary superstition and pre-logical thinking.) *Akad. Nauk XLV N. Ya. Marru*, 1935, 461-496.—Magical thinking, which according to Lévy-Bruhl is typical of primitive man, is frequently found among modern civilized people. Inversely, the causal, logical method of thinking and an understanding of true relationships is not at all foreign to primitive consciousness. Both types of thinking coexist on the primitive as well as on higher cultural levels and the

choice between the two depends on the object of the thinking process, the content of experience. Whenever people maintained their own existence, for example, the rational method of thinking naturally prevailed; when they depended entirely on unforeseen coincidence, superstition, fortune telling and magic flourished. Numerous examples are given of these contentions.—*E. Kagarov* (Leningrad).

5276. Meshchaninov, J. J. *Yazyk i myshlenie v doklassovom obshchestve*. (Language and thought in pre-class society.) *Probl. Ist. dokapit. Obshch.*, 1934, No. 9-10, 18-44.—Very early in human history there was herd consciousness and a purely animalistic perception of natural phenomena. The social group and nature were considered units as a result of the contrast between nature and society as conceived by the collective consciousness. The part is identified with the whole and absolutely different concepts fail to be distinguished. With increasing control over nature and greater activity man developed the concept of driving forces which affect nature through man. This is what Marr calls "totem" and is held responsible for the results of man's activities. In the kinetic (sign) language inarticulate sound elements were present which became less diffuse as phonetic language developed. The latter stands, as does the former, in close connection with labor processes and occurred relatively late, probably in the late Paleolithic period (Cromagnon race).—*E. Kagarov* (Leningrad).

5277. Miles, C. C. *Sex in social psychology*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 683-797.—After tracing the development of the science of sex, the author says: "Sex in social psychology is a complex field with probably no part which is not also within the broad territories of biology, medicine, psychology, and sociology. Progress in its mapping and assaying depends on . . . application of laboratory, clinical, case-study, and statistical methods: on inductive and deductive procedure, on analytical and synthetic interpretation." She assembles and summarizes the available information on human sex differences, sex in the individual social life, and sex in the community life. Bibliography.—*E. Heidbreder* (Wellesley).

5278. Miles, W. R. *Age and human society*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 596-683.—In discussing the continuity of man, the author makes the point that the average physical-mental power of the race is maintained at a high and steady level by "the merging of brief flares of energy given off by each of a vast number and succession of individuals of whom only relatively few are exactly synchronous in their peak performance." He also discusses changes in human functions with age, age and group relations, and human age and industry. He believes that it is "the overlapping and the mutual influence of the psychological characteristics of youth, maturity, and age wrought together in and by relationships of family, community, and state that underlies the building of man's social culture and constitute his higher continuity." Bibliography.—*E. Heidbreder* (Wellesley).

5279. Mills, C. A. *Suicides and homicides in their relation to weather changes*. *Amer. J. Psychiat.*, 1934, 91, 669-677.—A study of the numbers of suicides and homicides in the years 1924 to 1928 indicates definite time relationships to weather changes as high- and low-pressure centers approach and pass by. It is likely that the wide shifts in temperature and pressure that accompany North American storms may play a considerable part in producing the mental instability of our population and the rising rate of mental breakdown.—*R. Goldman* (Clark).

5280. Minkowska, F. *Van Gogh, de samenhang tusschen zijn leven, zijn ziekte en zijn werk*. (Van Gogh; the connection between his life, his disease and his work.) *Ned. Tijdschr. Psychol.*, 1935, 3, 155-178.—The author follows Van Gogh's disease to its constitutional basis and shows the presence of pathological factors in his life before the onset of his psychosis and their manifestation in his work. Throughout his life Van Gogh demonstrated a bipolarity consisting of concentrated affectivity (towards people and his work) and impulsive tendencies (irritability, instability, revolutionary ideas). There is no observable change of character after the onset of epilepsy, a diagnosis which seems preferable to that of schizophrenia because of the absence of dissociation, disintegration and autism. The same bipolarity is seen in his work: concentration on each detail, condensation of colors, combination of parts into wholes, but on the other hand the roughness and intensity of contours accentuated by circles. In his latest works there occurs a new element in the wavy line, which seems to indicate his resignation to the inevitable end. There seems to be no sign of a change in his style or of deterioration of his work as a result of the psychosis, as evidenced by several reproductions.—*H. Beaumont* (Kentucky).

5281. Morgenthaler, W. *Ueber kranke Ehen*. (Unhappy marriages.) *Schweiz. Arch. Neurol. Psychiat.*, 1935, 35, 55.—This study is based on 150 cases and is accompanied by tables. The cause of marital conflicts is not simply a difference in the character of the partners. Persons of different temperaments can have a very harmonious married life, although the divergences should not be so great that there are no points of contact. In unhappy marriages, however, it is often found that each partner seeks completion and compensation in the other, but that these possibilities, although actually latent in the partner, do not come to fulfillment.—*P. Krieger* (Leipzig).

5282. Müller, K. *Die Psyche des Oberschlesiens im Lichte des Zweisprachen-Problems*. (The mind of the Upper Silesian in the light of the bilingualism problem.) Bonn: Brand, 1934. Pp. 71.—*R. R. Willoughby* (Clark).

5283. Murchison, C. [Ed.] *A handbook of social psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 1195. \$6.00.—This book is "the initial attempt to organize a representative cross-section of serious methods of investigating social mechanisms." The table of contents follows: Part I. Social phenomena in selected populations. 1. Population behavior of bacteria, R. E. Buchanan. 2. Social

origins and processes among plants, Frederic E. Clements. 3. Human populations, Warren S. Thompson. Part II. Social phenomena in infrahuman societies. 4. Insect societies, O. E. Plath. 5. Bird societies, Herbert Friedmann. 6. The behavior of mammalian herds and packs, Friedrich Alverdes. Part III. Historical sequences of human social phenomena. 7. Social history of the negro, Melville J. Herskovits. 8. Social history of the red man, Clark Wissler. 9. Social history of the white man, W. D. Wallis. 10. Social history of the yellow man, Edwin Deeks Harvey. Part IV. Analyses of recurring patterns in social phenomena. 11. Language, Erwin A. Esper. 12. Magic and cognate phenomena: an hypothesis, Raymond Royce Willoughby. 13. Material culture, Clark Wissler. Part V. Analyses of some correlates of social phenomena. 14. The physical environment, Victor E. Shelford. 15. Age in human society, Walter R. Miles. 16. Sex in social psychology, Catharine Cox Miles. 17. Attitudes, Gordon W. Allport. 18. Social maladjustments: adaptive regression, F. L. Wells. Part VI. Experimental constructions of social phenomena. 19. Relatively simple animal aggregations, W. C. Allee. 20. Social behavior of birds, Thorleif Schjelderup-Ebbe. 21. Social behavior in infrahuman primates, Robert M. Yerkes and Ada W. Yerkes. 22. The influence of social situations upon the behavior of children, Lois Barclay Murphy and Gardner Murphy. 23. Experimental studies of the influence of social situations on the behavior of individual human adults, J. F. Dashiell. Name index. Subject index.—*E. Heidbreder* (Wellesley).

5284. **Murphy, L. B., & Murphy, G.** *The influence of social situations upon the behavior of children.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 1034-1096.—The purpose of the authors is "to clarify problems and research methods and to see in what respects systematic research gives us results which everyday observation could not yield." The discussion deals with three main topics: (1) the general problem of the relation of specific situations to specific social responses of children, with special reference to the problem of variability versus "consistency" in personality; (2) an analysis of research procedures; (3) a survey of the findings which the material affords. The present trend in social psychology is toward placing less emphasis upon isolated stimuli and responses and more upon functionally significant whole situations and upon the dynamics of the behavior of whole organisms. Bibliography.—*E. Heidbreder* (Wellesley).

5285. **Nadoleczny, M.** *Hemmungen der Sprachentwicklung.* (Inhibitions to speech development.) *Kinderärztl. Prax.*, 1934, No. 10.—The author divides the causes of inadequate speech development into two types, idiosyncratic (genotypic) and paratypic, and discusses them. Among the former are included disagreeableness of speech, timidity, and motor developmental inhibitions, and among the latter, birth traumas and defective upbringing. Up to about the fourth or fifth year the goal should be to awaken the desire for speech on the basis of intercourse with other

children in play situations. Beyond this period practice in speech is necessary.—*D. Shakow* (Worcester State Hospital).

5286. **Opler, M. E.** *The concept of supernatural power among the Chiricahua and Mescalero Apaches.* *Amer. Anthropol.*, 1935, 37, 65-70.—Apache religion consists in a multitude of power-seeking rites adapted to secure supernatural aid in almost every conceivable situation of life. The Apaches conceive of a supreme deity whose power pervades all things and often attaches itself to the service of man through a great variety of media, including sun, lightning, and animals. Everyone is a possible recipient of such power, which he is supposed to accept with reluctance. The same individual may receive a variety of powers in succession and is not obliged to make public announcement or use of them. These powers may be transmitted from older to younger people, usually members of the family. It is believed that practice of a power rite with unusual success brings destruction of oneself or of a near relative. The author suggests that this is a mechanism for expressing a dislike which would be socially ruinous. It would seem that the Apaches are a nation of medicine men, since everyone of middle age possesses some special supernatural power.—*C. M. Diserens* (Cincinnati).

5287. **Paget, R.** *This English.* London: Kegan Paul, 1935. Pp. xii + 118. 4/6.—The theory is expounded and illustrated that spoken language symbolizes meaning through the close connection of mouth and face gesture with realistic significance. Many experiments are suggested. Something also is said about spelling and pronunciation, and the movement for the development of Basic English is supported.—*F. C. Bartlett* (Cambridge, England).

5288. **Patrick, C.** *Creative thought in poets.* *Arch. Psychol.*, N. Y., 1935, No. 178. Pp. 74.—The problem was to make an examination as direct as possible of the process of creative thought in the case of composing lyric poetry. It was done by studying creative thought in poets. There are four stages of creative thought, preparation, incubation, illumination, and verification. When the poems written in this experiment were compared with the published work of the same authors, they were found to be written in the same characteristic styles. Poets look for some deep meaning in a picture, something of emotional value or something suggestive of human life, while non-poets write more about the picture or some idea which it immediately suggests. Poets put more imagination and meaning in their poems and are more dominated by the conventions of modern poetry.—*E. M. Achilles* (Columbia).

5289. **Peck, M. W.** *A psychiatrist views the drama.* *Psychoanal. Rev.*, 1935, 22, 306-313.—This is a psychoanalytic study of Eugene O'Neill's *Days Without End*. In the beginning the chief character is responding to loss of parental love, which is not a usual reaction. This man is diagnosed as a neurotic personality and shows an immaturity in his psychic development, with cleavage and opposition between some major needs of his nature. He is ambivalent, showing hatred of love because it brings him into an

intolerable position of dependency. There are several interpretations of the character's personality changes. The reconstruction of his infantile character can be understood in terms of modern psychology.—*L. Selling* (Wayne).

5290. **Pitfield, R. L.** *Chaucer's nervous depression.* *J. nerv. ment. Dis.*, 1935, 82, 30-32.—A quotation of a fragment from the poem *The Dethe of the Blaunche Duchess*, with a free translation.—*C. R. Atwell* (Boston Psychopathic Hospital).

5291. **Porto-Carreiro, J.** *Conceito psicanalitico da pena.* (The psychoanalytic concept of punishment.) *Arch. Med. leg. Ident.*, 1933, 3, 162-171.—The author discusses psychoanalytic concepts in relation to crime and punishment, reactions of fear and guilt, the role of sadistic and masochistic impulses, the attitudes and reactions of society, and the inadequacy of punishment as a deterrent of crime. The author anticipates the eventual psychological understanding of the criminal rather than the determination of legal responsibility, and he believes that education, oriented by analysis, will destroy penology and constitute the approach to a crime-free society.—*M. H. Erickson* (Eloise Hospital).

5292. **Pulver, M.** *Trieb und Verbrechen in der Handschrift. Ausdrucksbilder asozialer Persönlichkeiten.* (Drive and crime in handwriting. Expressional pictures of asocial personalities.) Zurich, Leipzig: Orell Füssli, 1934. Pp. 238. RM. 6.40.—*R. R. Willoughby* (Clark).

5293. **Ridenour, N.** *The treatment of reading disability.* *Ment. Hyg., N. Y.*, 1935, 19, 387-397.—Suggestions are given for retraining of the type described by Monroe and Orton, as well as the author's methods of tutoring children of normal IQ who were retarded in reading from 2 to 5 years. The importance of building up in the child a desire for reading is pointed out. Since classroom methods have failed, the tutor should not hesitate to follow any method that yields results. Frequent lessons are advocated. In many cases seeing the child only once or twice a week does more harm than not seeing him at all, since he becomes more discouraged because he has failed again. Monroe's *Children Who Cannot Read* is recommended by the author. The tutor is cautioned against selecting material that is too difficult for the child. A list of reading books is given. After 25 to 30 lessons under the conditions described in this article the writer has seen a child's reading show a gain of from 2 to 3 years.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.).

5294. **Riemann, L.** *Beitrag zur Psychologie der Kindesmütter in Vaterschaftsprozessen.* (Contribution to the psychology of the mother in paternity cases.) Greifswald: Adler, 1935. Pp. 32.—*R. R. Willoughby* (Clark).

5295. **Ritter, J.** *Ueber ein neues Kierkegaard Buch und über die Möglichkeit, Kierkegaard psychologisch zu deuten.* (A new book about Kierkegaard and the possibility of a psychological interpretation of Kierkegaard.) *Bl. dtsch. Phil.*, 1935, 8, 431.—This is a critical discussion of F. C. Fischer's book *Die Nullpunktexistenz*. In it Kierkegaard's form of life

is characterized as zero-existence, exemplified by his pseudonymity, his immateriality, his eroticism and dialectics. His pessimism is considered the social manifestation of this zero-attitude. Against this, Ritter argues that this psychological method cannot do justice to Kierkegaard because genius cannot be grasped by typological means. In the attempt, the uniqueness of his existence is lost. It is also argued that Kierkegaard's relation to his father, considered pathological by Fischer, was in reality purely mental in that he accepted his psychic heritage.—*P. Klimpel* (Leipzig).

5296. **Scheidt, W.** *Kulturbilogie und Rassenpsychologie.* (Cultural biology and racial psychology.) *Arch. Bevölker. Wiss. Bevölker. Polit.*, 1935, 5, 8.—Scheidt sets forth the basic considerations for a new psychology "in accord with the laws of life," especially in its relation to culture, language and civilization. Racial psychology is psychogenetics conceived as the science of hereditary psychic Anlagen, while psychomechanics (not in the sense of mechanism but of predictability) is only the physiology of the vital processes consequent to the sensory functions. Psychomechanics is ancillary to psychogenetics, although each conditions the other.—*P. Krieger* (Leipzig).

5297. **Schneickert, H.** *Verbrecherhandschriften.* (Handwritings of criminals.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 11-15.—The author does not give any analysis, but only the results of his experiences; it has not yet been possible to find characteristics of handwriting which are typical for criminals. For such a purpose it would be necessary to investigate very closely the genetic development of the handwriting of thousands of individuals with pronounced criminal tendencies.—*P. Klimpel* (Leipzig).

5298. **Schneickert, H.** *Schriftvergleichung und Indizienidentität.* (Comparison of handwriting and circumstantial identity.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 62-67.—Comparison of handwriting for identity of circumstantial evidence cannot be done on a mathematical, but only on a psychological basis. The latter allows qualitative distinctions.—*P. Klimpel* (Leipzig).

5299. **Sellin, T., & Shalloo, J. P.** *A bibliographical manual for the student of criminology.* Philadelphia (3457 Walnut St.): Author, 1935. Pp. 45. \$.50.—*R. R. Willoughby* (Clark).

5300. **Shelford, V. E.** *The physical environment.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 567-595.—Man's relations to the physical environment are considered in the terms commonly used in ecological studies of plants and animals. The relations of various animals to physical conditions are presented to bring out similarities between certain responses of man and those of other animals. As regards vigor, health and death, man's relations to factors in the physical environment are similar to those of other animals. As man developed, physical controls of comfort, health, and disease have been displaced by

cultural controls. Suggestions are made for further research on the relations between man and his physical environment. Bibliography.—E. Heidebreder (Wellesley).

5301. Sternheim, A. *Enkele sociologische beschouwingen over het gezinsverband*. (Some sociological considerations of the family structure.) *Mensch en Maatsch.*, 1935, 11, 298-311.—Changes in economic life during the 18th and 19th centuries, resulting in urban concentration of population, were indirectly responsible for the reorganization of family structure from a productive to a consuming unit. In the modern family there is an increasing tendency to differentiation in the developmental level of its individual members. Its homogeneity in an economic, mental and psychic sense is gradually being destroyed and as a result its solidarity undermined. A survey of the principal contributions to the field is given and the authors, especially those of American studies, are criticized for considering the disintegration of the family as an endogenous phenomenon. The author considers it a reflection of the imperfections of our civilization, based as it is on extreme contrasts, hierarchy, and suppression of needs and desires. The Institut des Recherches Sociales is now preparing a study of the family which aims especially to investigate the problem of authority within the family.—H. Beaumont (Kentucky).

5302. Symington, T. A. *Religious liberals and conservatives*. *Teach. Coll. Contr. Educ.*, 1935, No. 640. Pp. v + 104.—To 10 groups of subjects varying from 50 to 100 in number, and totaling 612 (287 of conservative and 325 of liberal background) was given a test of religious thinking and one or more of the following tests: Otis, mental ability; Pressey X-O; Allport, A-S; Bernreuter personality; a questionnaire. Librality in religious thought was found to be positively related to intelligence, amount of education, attendance at college courses of a liberal type; negatively related to church attendance; not related to personality types as indicated by Bernreuter or Allport tests, attendance at Sunday school, church membership. The educational implications of the results are pointed out. The bibliography lists 47 titles; the appendices give the test of religious thinking, the questionnaire, the personality inventory, and the statistical results.—J. M. Stalnaker (Chicago).

5303. Thompson, W. S. *Human populations*. In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 49-79.—Though a more or less steady growth in human population has been commonly assumed, it is probable that fluctuations in numbers have been the rule in any given area. The author believes that population growth varies according to environing conditions rather than to basic changes in human desire and power to reproduce. Population growth is limited by pressure of population on means of physical subsistence, by social checks such as abortion and infanticide, and by catastrophic factors such as famine. Among the factors which make desirable the control of population in the West are the falling death rate, basic changes in economic organization, changing

functions of children in society, and factors like desire for luxury which operate differently in different social groups. Man is certain to bring population growth more and more under definite control and will probably make many mistakes in determining the proper numbers. Bibliography.—E. Heidebreder (Wellesley).

5304. Tramer, M. *Lebensschicksal einer jugendlichen Rechtsbrecherin*. (History of a young female delinquent.) *Z. Kinderpsychiat.*, 1934, 1, 161-164.—D. Shakow (Worcester State Hospital).

5305. Unwin, J. D. *Sexual regulations and cultural behavior*. London & New York: Oxford Univ. Press, 1935. Pp. 62. \$.85.—An address delivered before the Medical Section of the British Psychological Society in which the author summarizes his findings reported in detail in *Sex and Culture*. On the basis of an investigation to determine the validity of the proposition that what is "called 'civilization' has been built up by sacrifices in the gratification of innate desires," the author concludes that "if we know what sexual regulations a society has adopted, we can prophesy accurately the pattern of its cultural behavior." Besides a few historical peoples, the author studied uncivilized peoples of whom the knowledge is adequate and reliable. These he divides into three major groups, deistic, manistic, and zoistic, according to the steps they take to maintain a right relationship with the mysterious powers or forces about them. Whereas those in the first group built temples to one god or many gods, the second group paid post-funeral attention to the dead, and the third placed an offering before a living person—the magician. "... these three different modes of behavior invariably accompanied three different kinds of sexual opportunity." Pre-nuptial continence went with the deistic, irregular or occasional continence with the manistic, and pre-nuptial freedom with the zoistic. The author knows of no exceptions to these rules, which hold good for all races and all geographical environments. Various charts illustrating these points in numerous present-day uncivilized societies are included.—D. Shakow (Worcester State Hospital).

5306. Van Vliet, T. V. *The emotional effect of intervals as found in a study of the melodies of art songs*. *Peabody Bull.*, 1935, 31, No. 2, 30-35.—A study of the voice lines of 475 art songs with respect to the musical intervals used on words expressing joy, grief, etc., and a comparison of the melodic contours (as represented graphically) of eight sad and eight happy songs.—L. A. Petran (Peabody).

5307. Vinci, F. *Il metodo statistico nello studio dei fatti sociali*. *Scientia, Bologna*, 1935, 57, 442-448.—The author describes the growing application of the statistical method to the study of social facts, revealing as the greatest difficulty the development of a sharp critical and constructive spirit in the study of democracy and economics; to this various doctrines and criteria are due. After having pointed out the more recent development of analyses, the author affirms that the scientific study of social dynamics assumes a statistical basis, and formulates analytically empirical laws of general bearing, profiting by the

general notions formed from the investigation.—*M. Gifford* (Jamaica Plain, Mass.)

5308. **Volkman, K.** *Das indische Seilkunststück.* (The East Indian rope trick.) *Arch. ges. Psychol.*, 1935, 93, 444-452.—The story of the rope-ascending trick which has been attributed to Chinese and Indian conjurors is commented on, and the fallacy of its authenticity is revealed. The author scoffs at the idea of hypnosis as explanatory, and holds that it can be attributed only to the vivid imagination of the story teller.—*A. B. Herrig* (Michigan Central State Teachers College).

5309. **Wallis, W. D.** *Social history of the white man.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 309-359.—After discussing the cultural development of the white man from his earliest known achievements through the modern period, the author considers the role of culture contacts and culture diffusions. He also considers recent social changes and trends in Europe and the United States, and the efforts to understand, control, and direct social life. He concludes: "The white man is not a social group or an organization of groups, but a sum total of groups of white men having nothing in common save a pattern of race characteristics and, for the most part, Indo-European languages. . . . The white man has no known common history . . . no common civilization. . . . Membership in the white race . . . connotes no one type of life; and has little meaning apart from reference to physical traits. Viewed from the larger perspective of human history, and leaving aside the question of social indebtedness, the white man has been in recent centuries the greatest creator of civilization and also the greatest destroyer of both human and natural resources."—*E. Heidbreder* (Wellesley).

5310. **Webster, H. A., & Tinker, M. A.** *The influence of paper surface on the perceptibility of print.* *J. appl. Psychol.*, 1935, 19, 145-147.—Two equivalent series of 64 easy five-letter words were presented to five subjects on eggshell paper stock and two grades of enamel (gloss) paper stock. No differential or consistent effects were obtained by the distance method of perceptibility of words. "The alleged eye-strain from reading material printed on glazed paper must be due entirely to continuous reading in light not uniformly dispersed rather than inability to see the print satisfactorily."—*R. S. Schultz* (Psychological Corporation).

5311. **Weinreich, M.** *Studjum o mlodziy zydowskiej.* (A study of Jewish adolescents.) *Przeglad socjol.*, 1935, 3. Pp. 55.—The author presents the theoretical and methodological principles which governed the selection of material and problems for a wide study of the psycho-sociological adaptation of eastern Jewish adolescents to their total environment. Some of the important problems will be the reaction to the realization that they belong to an underprivileged minority, the explanation why the rate of criminality among Polish Jews is smaller than that of the majority population in spite of the urban character of the Jewish population. The term eastern Jew includes also relatives who emigrated to

foreign countries because of the strength of the Jewish family group in spite of geographical distances. The material will consist of 303 autobiographies (including those of 54 girls) sent in from 150 cities in 9 countries. These will be completed by biographical data obtained from parents, siblings, teachers, employers, etc., and other available sources of information (e.g. diaries). The study has been organized by the Jewish Institute of Science in Wilno.—*Z. Piotrowski* (Columbia).

5312. **Wendt, W.** *Die irreführende Denkart der Abergläubigen und ihre falsche "Intuition."* (The misleading way of thinking of the superstitious and their false intuition.) Munich: Ludendorff, 1935. Pp. 15. RM 0.25.—The affective-primitive and the logically disciplined ways of thinking coexist in modern life. The latter is used in the natural sciences and those other branches which apply the same methods, while the former is a remnant of a lower cultural level. It is found not only among primitive tribes, but also among our superstitious fellow-citizens, frequently in undiminished form. The Christian church systematically teaches it to its followers, and even among those who are capable of logically-disciplined thinking it is frequently found as a popular alternative method, used in all cases which do not concern their immediate practical interests. Even the concept of truth held by the old religious authorities and modern theologians is fundamentally different from that held by logically disciplined thinkers.—*W. Wendt*.

5313. **Willoughby, R. R.** *Magic and cognate phenomena: an hypothesis.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 461-519.—The author proposes the hypothesis that the phenomena centering in magic and kindred beliefs and practices form a more or less continuous series, and may be regarded as defensive efforts of the organism to neutralize or resolve tension or anxiety. He discusses the nature of anxiety, citing examples arranged in the presumable order of intensity of the anxiety requiring control. Concerning the social significance of anxiety and its control, he discusses the prevalence, sources, and effects of anxiety in relation to culture type; estimates the efficacy and desirability of various control methods; and considers the possibility of improving them. The final section presents the few points of view hitherto advanced on the subject. Bibliography.—*E. Heidbreder* (Wellesley).

5314. **Wissler, C.** *Social history of the red man.* In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 269-308.—Three main types of society were found among the American Indians in 1492: those of (1) city-states and empire builders, (2) agricultural tribes, (3) hunting tribes. Each of these types is discussed with reference to material civilization; social, industrial and political organization; inscriptions; literature; religion, ceremonialism and mythology. On the basis of this survey an attempt is made to present the general characteristics of aboriginal life in 1492. For the time sequence demanded by social history as a chronological framework, it is customary to

turn to archeology. It is also possible to set up general time perspectives by interpolating outlines in assumed sequence based upon geographic distribution and the logical relations of the customs involved. Bibliography.—E. Heidebreder (Wellesley).

5315. Wissler, C. **Material culture.** In *A Handbook of Social Psychology*. Worcester, Mass.: Clark University Press, 1935. Pp. 520-564.—An important key to the understanding of man's cultural development is the material equipment with which the various cultures operate. Research in this field has moved toward the solution of two main problems: (1) the place, order, and relative time of important changes; (2) the manner in which such changes were brought about. Specific instances of material culture are discussed; e.g. fire, weaving, ceramics, tools, and modern material culture. A résumé observes that material culture is accumulative; that the evolution of tools and machines has sometimes been inferred from structural resemblances; that the important behavioral factor in the history of material culture is invention; that the timing of activities is the key to material life and mechanization; that standards of living in modern times are conceived in terms of material culture; that peoples may be differentiated and even ranked according to the variety and complexity of their material cultures; that population density seems conditioned by material culture; that deep-set technological and economic patterns are observable in material cultures; and that the totality of man's culture, when written, must be in terms of material culture. Bibliography.—E. Heidebreder (Wellesley).

5316. Wolfe, W. B. **The psychopathology of the juvenile delinquent.** *Med. Rec.*, N. Y., 1935, 142, 19-22.—The problem of juvenile delinquency cannot be studied as the resultant of various causative agents, but must be regarded as a social problem which requires understanding not only of its causes, but also of its purposes, objectives, aims, and results. Delinquency must be recognized as a protest against the existing social order and as an index of the fact that the child has not had his personal needs met properly in introducing him to the social order. Understanding of the delinquency requires identification with the delinquent for the purpose of appreciating the circumstances and conditions leading to the specific anti-social behavior. A case history is cited of a 4-year-old maladjusted boy. An analysis of his misconduct from the point of view of individual psychology disclosed his maladjustment to arise from his jealousy of his baby sister.—M. H. Erickson (Eloise Hospital).

5317. Zietemann, —. **Die Kinderhandschrift.** (Children's handwriting.) In: Kreusch, *Praktische Graphologie für das tägliche Leben*. Berlin: 1935. Pp. 46-50.—The graphological interpretation of the handwriting of children is very difficult, because the insufficient command of technique, the tendency to imitate, orthographical difficulties, etc., obscure the purely expressive features of the writing. In spite of these difficulties the author succeeded in obtaining some positive results. The findings on the handwriting

of adults cannot be applied to children.—P. Klimpel (Leipzig).

[See also abstracts 4872, 4930, 4963, 5031, 5032, 5048, 5049, 5050, 5054, 5062, 5064, 5066, 5069, 5081, 5085, 5118, 5146, 5152, 5161, 5196, 5211, 5212, 5226, 5332, 5346, 5348, 5364, 5372, 5383, 5390, 5401, 5402, 5415, 5417.]

INDUSTRIAL AND PERSONNEL PROBLEMS

5318. Beritoff, I. [On the psycho-nervous principles of labor behavior of man.] *Trud. biol. Sekt., Akad. Nauk SSSR, zakavkaz. Filial*, 1934, 1, 85-87.—The author presents an analysis of the flow system of labor, and on the basis of this analysis sets forth a number of practical proposals.—R. Smith (Clark).

5319. Burger, H. **Taube Automobilführer.** (Deaf automobile drivers.) *Acta Oto-Laryng., Stockh.*, 1935, 22, 147-153.—The various kinds of deafness must be taken into consideration in determining the advisability of allowing deaf people to drive automobiles. Those with paracusia Willisiana, for example, have increased acuteness of hearing in the midst of noise such as city traffic. Most traffic signals are visual, so that a deaf person is not necessarily unduly handicapped. If he is alert and determined to compensate for his handicap, he may have less distractions than the person with normal hearing. On the other hand, he may be handicapped in hearing abnormal noises in his own motor and may have difficulty dealing with the public if he tries driving as a vocation, such as being a taxi driver.—M. B. Mitchell (New Hampshire State Hospital).

5320. Calabresi, R. **L'Istituto Nazionale Inglese di Psicologia Industriale.** (The British National Institute of Industrial Psychology.) *Org. sci. Lavoro*, 1935, 5.—An article illustrating the activity of this British Institute, pointing out the interest and favor shown toward it by factory managers, who solicit its cooperation for the psychotechnical study of the problems concerning work in the factories.—G. M. Hirsch (Rome).

5321. Dorcus, R. M. **Personality evaluation and business relations.** *Mech. Engng.*, N. Y., 1935, 57, 277-280.—Character, temperament, and personality are differentiated; experiments are cited to illustrate the general principles in the following: the relation of personality to physique; judging and rating character traits; objective tests of personality, e.g., the Downey will-temperament test; tests for introversion-extraversion; trade and aptitude tests; interests (and scales).—H. A. Copeland (Cincinnati Employment Center).

5322. Feitscher, P. **Problemen der moderne psychotechniek.** (Problems of modern psychotechnics.) *Ned. Tijdschr. Psychol.*, 1933, 1, 254-288.—(Not seen.)—H. Beaumont (Kentucky).

5323. Granniss, E. R. **Mental hygiene as applied to industrial-accident prevention.** *Ment. Hyg.*, N. Y., 1935, 19, 398-404.—Workers' mental attitudes cause at least 85% of all accidents. Accident-prones (workers who have the most accidents) are generally found to make the most errors in their work, have

poor attendance records, and react more slowly or even unwillingly to supervision. The importance of having a psychiatrist and an industrial psychologist attached to the staff is pointed out. If such professional service cannot be had, a worker experienced in dealing with the personnel could, aided by the plant physician, be of value in building up healthy mental attitudes among the workers.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.)

5324. Höfler, W. *Fortschritte in Psychotechnik und Psychotherapie in der Zahnheilkunde*. (Progress of applied psychology and psychotherapy in dentistry.) Tübingen: Studentenwerk, 1934. Pp. 23.—A discussion of the contributions which psychological and psychotherapeutic methods can make to the profession of dentistry in creating optimal working conditions and aiding the remedial process. The prospective dentist is taken as a starting point of this study, which includes such topics as: determining ability for the profession, vocational selection, plan of study, suggested changes in vocational preparation, student-teacher relationship, selection of a location, office equipment, use of time, division of labor between dentist and assistant, and occupational hygiene. The profession depends for its progress on results obtained by medicine, the science of work, social hygiene, and industry. Psychotherapeutic methods may contribute to creating a spirit of confidence in the patient.—*W. Höfler* (Sigmaringen).

5325. Viteles, M. S. *Le point de vue psychologique du chômage aux États-Unis*. (The psychological aspects of unemployment in the United States.) *Travail hum.*, 1935, 3, 129-138.—The reduction of hours to increase employment may have the opposite effect because of the elimination of fatigue and difference in the pace set by the worker himself. Certain textile workers actually produced more in 40 hours than in 54. Studies have been made of groups of unemployed. Of a group of seasonal workers one third were found ill adapted for any kind of work; on the other hand the majority of those applying at a bureau were employable. Study of the "market" indicates less need for skilled workers. In 22% of the jobs two weeks' training was adequate. It is advisable to train a person not for a single job but for a group of jobs. Dexterity and fundamental skills are important. Vocational profiles based on batteries of tests have been devised for some types of work.—*H. E. Burtt* (Ohio State).

5326. Wegener, F. *Das Arbeitsschicksal*. (Work fate.) Berlin: Junker & Dünhaupt, 1934. Pp. 220. RM. 8.—The structures of human society are built up of activities of various sorts. Mechanized activities are called "work," and in so far as work is undertaken and accomplished we speak of "work fate." This problem is considered from the standpoints of task and of pure work. In the chapter on work as activity the controlling factor of work, the will, is analyzed: emotions determine the drive element of the will; custom, usage, external influences the duty element; reflection the thought element. Work is determined by the ability to perform and undertake it (ability tests), while environment is an objective determinant. The chapter on work as experience

considers the fundamental problems of economics, including the accompanying experiences of work, viz., fatigue and practice (work curves) and the mental effects of the environment on work.—*W. Arnold*.

[See also abstracts 4890, 5225, 5336, 5343, 5353.]

EDUCATIONAL PSYCHOLOGY

5327. [Anon.] *Psychoanalytische Pädagogik im Jahre 1934*. (Psychoanalytic education in the year 1934.) *Z. Psychoanal. Pädag.*, 1934, 8, 403-407.—A report of the activities in the field of psychoanalytic education in various countries of Europe during 1934.—*H. Beaumont* (Kentucky).

5328. Archer, J. K. *Prediction of success of scholars*. *Sch. & Soc.*, 1935, 41, 573-575.—The subjects of the study were students attending Cornell University from 1913 to 1927 who were awarded university scholarships on the basis of their performance on the New York State Regents Examinations. The correlation between the average grade obtained by these subjects on the Regents Examination and the average grade they earned while at Cornell is .49. Of 2049 of these scholars attending Cornell University at some time in the period mentioned above, 83.3% received at least one degree from the institution. Their salaries now average about \$3000 and have been only slightly affected by the depression. Many of the group are teachers in colleges or high schools.—*H. L. Koch* (Chicago).

5329. Barr, A. S., & Reppen, N. O. *The attitude of teachers toward supervision*. *J. exp. Educ.*, 1935, 3, 237-301.—The study deals with teachers' criticisms and commendations of supervision as practised in cities of 20,000 to 150,000 in Ohio, Indiana, Michigan, Illinois, Wisconsin and Iowa. The monograph is divided into seven chapters with the following headings: statement of the problem, collection of data, the teachers who supplied the data, the character of the supervision to which the teachers included in the investigation were subjected, the supervisor's most frequent mistakes as seen by teachers, suggestions made by teachers for the improvement of supervision, and summary of findings. A bibliography of 23 titles is appended.—*H. W. Karn* (Clark).

5330. Breed, F. S. *On changes in methods of teaching*. *Sch. & Soc.*, 1935, 41, 558-563.—The writer directs his attacks primarily at those "progressives" in education who accept a pragmatic philosophy. Maintaining that these hold an untenable view of the nature of truth, knowledge, and education, he defends the following thesis: education is not the creation of existents, but conformity thereto; knowledge is the facing of facts.—*H. L. Koch* (Chicago).

5331. Brueckner, L. J. *Pedagogical factors associated with learning difficulty*. *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 49-62.—Inefficient and inadequate instructional materials produce learning difficulties: textbooks may be too difficult for some pupils in one grade, rigid courses of study often induce formalized instruction, texts are frequently unattractive and uninteresting, and practice exercises have been organized with little recognition of the varying rates of pupil progress. Teachers tend to emphasize specific skills in reading to the exclusion of wider objectives.

Abuses of the marking system produce undesirable consequences. Large classes prevent teachers from determining the reasons for a pupil's failure to progress satisfactorily. Moreover, work attitudes become neglected. Compulsion and domination by the teacher result in undesirable docility and submissiveness. The personal relationships between teacher and pupil are important in developing wholesome attitudes. Teachers should have an adequate systematic knowledge of the learning process. All individual difficulties require a skilled analysis followed by remedial techniques of proved value.—*P. S. de Q. Cabot* (Harvard).

5332. Chave, E. J., & others. Religious education bibliography. January 1933 to September 1934. *Relig. Educ.*, 1935, 30, 40-65.—*R. Goldman* (Clark).

5333. Crawford, C. C., & Hale, V. L. Results of an activity program in a small school. *Sch. & Soc.*, 1935, 41, 718-720.—Small groups of third-, fourth-, and sixth-graders were placed under an activity program for 2.5 months, their progress in the major school subjects being measured by standardized tests. A control group of children composed of fourth- and fifth-graders worked under a more formal school program. Both groups made more than the normal amount of progress during the experimental period. The activity group gained as much as did the control and had the supposed social advantages of the less formal system, nor was the former's achievement profile any less regular than the latter's. In the case of a small number of children who worked under both programs, the gain was greater under the activity plan.—*H. L. Koch* (Chicago).

5334. Eurich, A. C., & Carroll, H. A. Educational psychology. New York: Heath, 1935. Pp. vii + 436. \$2.24.—Three general problems are treated: (1) the measurement of abilities, achievements and other aspects of personality; (2) individual differences and differentiated instruction; and (3) learning. The first eight chapters deal with the first problem. Chapters IX to XIV are concerned with the gifted, subnormal, and maladjusted child and discussions about individual differences. The final three chapters deal with the problems and conditions of learning.—*R. Goldman* (Clark).

5335. Fenichel, O. Ueber Erziehungsmittel. (Means of training.) *Z. psychoanal. Pädag.*, 1935, 9, 117-126.—Learning ability depends not only on talent but also on the development or repression of various drives and on sympathy or dislike towards the teacher, which may be caused by transference of earlier experiences to the new school situation. Training consists of substituting the reality principle for the pleasure principle by means of a sort of conditioning. Consequently, three means are available to obtain the desired results: direct threats, utilization of the fear of losing the adult's affection, and the promise of increased affection when the child represses a drive. There is danger of excessive repression, which may result in neurotic symptoms or squandering of energy on the struggle of repression. Drives that are occasionally satisfied are, in the interval, more easily controlled than those which are never allowed expression.—*H. Beaumont* (Kentucky).

5336. Fitch, J. A. Vocational guidance in action. (Amer. Ass. soc. Workers Publ., Job Analysis Ser., No. 5.) New York: Columbia Univ. Press, 1935. Pp. 311. \$2.75.—*R. R. Willoughby* (Clark).

5337. Fletcher, H. F. Selection of students at the college level for the study of law. *Sch. & Soc.*, 1935, 41, 686-688.—Correspondence with 75 deans and professors of law concerning the qualities they believed to contribute significantly to success in the practice of law revealed that these teachers weighed heavily the following: intelligence, character, social sense, scholarship, industry, and courage. Accordingly, the University of Illinois proposes to test its pre-law students in intelligence, character, and social sense with a view to developing, if possible, an effective procedure for detecting legal talent.—*H. L. Koch* (Chicago).

5338. Forest, I. The school for the child from two to eight. Boston: Ginn, 1935. Pp. 295. \$1.80.—*R. R. Willoughby* (Clark).

5339. Gray, R. A. Doctors' theses in education. U. S. Off. Educ. Pamphl., 1935, No. 60. Pp. 69. \$.10.—A classified subject list of 797 doctoral dissertations published and in manuscript available for loan from the Office of Education.—*C. M. Louttit* (Indiana).

5340. Griffith, C. R., Corey, S. M., & Potthoff, E. F. Workbook in educational psychology. New York: Farrar & Rinehart, 1935. Pp. vi + 201. \$1.25.—Each of the forty lessons which comprise this workbook is divided into: I, assignment; II, study exercises; and III, optional projects. The assignments are based upon Griffith's *An Introduction to Educational Psychology*.—*R. Goldman* (Clark).

5341. Hall, K. Zur Frage der Zusammenhänge zwischen Schulleistungen, Begabung, Kinderzahl und Umwelt. (The question of the relationship between school records, mental endowment, number of children, and environment.) *Arch. Rass.-u. Ges-Biol.*, 1935, 28, 383-408.—A study from the Saarbrücken schools, accompanied by 35 tables. The average correlation between the parents' and the children's endowments was .50. Even when this was maximal (1.00), the correlation between the children's endowment and the number of siblings was only .50. The greater success of family as contrasted with institutional upbringing is explained by the fact that the family psychic relationship provides more adequate stimuli of parents on children and of child on child. Although these influences are classed as environmental, in reality they can be ascribed only to "hereditary flexibility of the family."—*P. Krieger* (Leipzig).

5342. Jones, V., & Brown, R. H. Educational tests. *Psychol. Bull.*, 1935, 32, 473-499.—A summary for 1934, including 193 titles. The most significant issue during the year has been that between intensive measurement of a narrow range of abilities (especially by Thorndike) and more extensive points of view (by vocational counsellors, Progressive Education Association, and American Historical Association). The present review covers the development and use of tests for diagnosis and remedial teaching, for prog-

nosis, guidance, and selection, and for survey and experimental purposes; also problems of test construction, and some teachers' classroom tests.—*J. F. Dashiell* (North Carolina).

5343. **Kroger, R., & Louttit, C. M.** The influence of father's occupation on the vocational choices of high school boys. *J. appl. Psychol.*, 1935, 19, 203-212.—Questionnaires submitted to 4543 boys in four technical and academic high schools. About 90% of the group express vocational choices. The larger percentage made choices at a level higher than the father's occupation. In comparison with census figures 70% of the boys want to engage in work represented by only 35% of the present gainfully employed population. Only 1% chose laboring occupations, which are represented by 11% of the fathers and 30% of the census population.—*R. S. Schultz* (Psychological Corporation).

5344. **Laugier, H., Toulouse, E., & Weinberg, D.** Biotypologie et aptitudes scolaires. *Travail hum.*, 1935, Ser. A, No. 4, 145-287.—Comprehensive examination of 124 boys aged 8-13, including family history, morphological type, anthropometry, medical history, physiological status, sensory acuity, memory, intelligence, character rating by other children, psychoneurotic inventory. Complete raw data are given. School marks have a reliability for 3 months vs. 3 months (corrected) of .96. Comparing 3 scholarship groups, the best ones are superior in the psychological tests and in ratings of sympathy and modesty. They are inferior physically, but the effect of age is somewhat equivocal. Weighting variables in regression equations, we have the following multiple correlations with scholarship: combination of 4 psychological tests .50, 4 physical measures .50, 4 psychological tests plus age (weighted negatively) .65, 4 physical measures plus age .53, physical plus psychological plus age .69.—*H. E. Burt* (Ohio State).

5345. **Livingood, F. G.** Estimates of high-school seniors. *Sch. & Soc.*, 1935, 41, 550-552.—Of 1029 seniors in 42 high schools in Maryland responding to a questionnaire, 813 indicated that they regarded the teacher they liked best as most effective in the school. Mathematics teachers were liked best much more frequently than they were liked least, whereas in the case of both English and the social sciences the incidence of most- and least-liked teachers was about equal. Of the three required subjects, English, social studies, and mathematics, high-school seniors were more interested in the last. Men teachers fell relatively less frequently among the least liked than did women. Of the most disliked teachers relatively more were under 30 years of age than was true of the most liked group. The teachers judged to be most effective were 30 years of age or over relatively more frequently than the teachers liked either best or least.—*H. L. Koch* (Chicago).

5346. **Manuel, H. T.** A comparison of Spanish-speaking and English-speaking children in reading and arithmetic. *J. appl. Psychol.*, 1935, 19, 189-202.—The New Stanford Achievement Test given in grades 2 to 8 reveals that (1) Spanish-speaking children are on the average a year lower in reading than arithmetic, (2) slightly better in arithmetical

reasoning than in computation, and (3) about one-fourth of a year lower in paragraph meaning than in word meaning. "If our results are typical there is no doubt that the average Spanish-speaking child suffers a serious and persistent language handicap at least as high as the eighth grade."—*R. S. Schultz* (Psychological Corporation).

5347. **Meyer, A. E.** Students' outline series: The history of education. New York: Longmans, Green, 1935. Pp. iv + 96. \$.75.—This book is a visual outline, the major topics discussed being in order: Oriental education, Sparta, Athens, Rome, Christian education, education during the middle ages, the Renaissance, the Reformation, the Catholic counter-reformation, realism, naturalism in education, the psychological movement, the scientific movement, Germany, France, England, Italy, the United States. A series of dates for reference in the history of education is appended.—*R. Smith* (Clark).

5348. **Olson, W. C.** Emotional and social factors in learning. *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 63-77.—"Instinctive responses, at first set off by a limited range of stimuli, may, through the process of learning, become attached to a wide and varied series of external situations." Emotional expression is comparatively unaffected directly by formal learning. Conformity to the social mores should not stifle the vital positive values inherent in emotional activity. Most classroom management neglects the feeling side of education. If a healthy adjustment is to be accomplished, emotional expression demands adaptive movements. The effects of social grouping may be both facilitative in nature and stimulating as situations for further learning. "Both constructive withdrawal and participation are valued by the social group." Social adjustment can be learned. Motivating forces in education are supremely important. Most of the experimental evidence on motivation is derived from the study of animal behavior. Lewin's conception of vectors is illuminating for the teacher. Freedom of activity and rest have their place in any enlightened school.—*P. S. de Q. Cabot* (Harvard).

5349. **Phillips, M. E., & Cox, L. E.** The teaching of biology. London: Univ. London Press, 1935. Pp. viii + 155. 4/6.—The book contains notes on the psychology of teaching and many practical suggestions for the shaping of courses.—*F. C. Bartlett* (Cambridge, England).

5350. **Phillips, P. C.** What age college entrance? *Amherst Grad. Quart.*, 1934, No. 93, 12-21.—A comparative study of students who enter college at 16 or 17 with those who enter at the normal age. Bases of comparison: mental development, moral development, physical development, health, longevity, participation in student activities, attitude of older alumni, success in after life. Includes data on research work with Amherst students. Results indicate that the younger students are superior in most respects to those who enter at the normal age. They are less active socially.—*T. L. Engle* (Indiana).

5351. **Rankin, P. T.** Environmental factors contributing to learning. *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 79-92.—The distinction between those environmental factors which affect all children as a

group and those which affect them as individuals is more one of degree than of kind. The library, the art institute, music, parks and playgrounds are public community factors influencing children's lives, while private commercial agencies are the press, the radio, the theater, and motion pictures. An effective school program is likewise influenced by neighborhood characteristics such as the degree of homogeneity of community interests, the uses made of leisure, the socio-economic status of the family, and the presence of adequate playground facilities. Parental attitudes, family unity, the child's experience with work outside school hours, travel and the ways of spending spare time must be considered by a teacher, who needs an understanding of the many factors influencing the pupil's behavior and development before adjustments appropriate to an individual's needs can be made.—*P. S. de Q. Cabot* (Harvard).

5352. Ribsskog, B. *Die Wirkung von Lob und Tadel in der Schule.* (The effect of praise and blame in school.) *Ned. Tijdschr. Psychol.*, 1933, 1, 518.—(Not seen.)—*H. Beaumont* (Kentucky).

5353. Schwarz, J. *Zyczenia zawodowe mlodziezy poznanskiej.* (Vocational choices of Poznan school children.) *Psychometria*, 1934, 1, 31-38.—1471 fourteen-year-olds expressed their vocational choice in writing. One finds the usual effect of parental occupation, social environment and type of school. City tradition also has some influence: a larger percentage of Cracow than of Poznan children preferred intellectual occupations.—*Z. Piotrowski* (Columbia).

5354. Sokolov, M. V. [The questions of school pedology.] Moscow: Uchpedgiz, 1935. Pp. 104.—The order of Narkompros defines the fundamental task of pedology in schools, viz., the investigation of age peculiarities of children and youth for the most effective forms of teaching and education. In this collected volume an attempt is made to answer pedagogically the fundamental questions of school life. The first three sections treat the principles and methods of rational completing of school classes. Further, N. Nassilova analyzes the notions of children of the first class. The organization of the lessons, as well as the intervals, are also discussed. The industrial practice of children is given by Koslova and Sokolov in the judgments of the children themselves.—*A. Yarmolenko* (Leningrad).

5355. Summers, W. G. [Ed.] *Conference on three special problems in guidance.* New York: Dept. Psychology, Fordham Univ. Grad. School, 1935. Pp. v + 136.—The proceedings of a conference held at the Fordham University Graduate School in December, 1934. The three problems discussed were those of professional standards, planning occupational futures, and the effect of economic conditions. Contributions are presented from educators, vocational guidance directors, business men, social workers, etc.—*D. Shakov* (Worcester State Hospital).

5356. Threlkeld, H. *The educational and vocational plans of college seniors.* *Teach. Coll. Contrib. Educ.*, 1935, No. 639. Pp. viii + 194.—The investigation is based on data derived from 2819 men and 1427 women seniors of 45 colleges and universities in Pennsylvania in the spring of 1928. A questionnaire

was sent to the students, a comprehensive college achievement test (Carnegie) was given, and school records were available. Most seniors considered attending college in their first year of high school, although the final decision was not made until their senior year. The chief reason for attending college was preparation for a vocation (not cultural value), chiefly the professions (and then teaching). The origin of their interests in their vocations was chiefly extra-mural. The colleges studied showed little evidence of planned vocational guidance. Each chapter has a bibliography; a total of 326 titles are listed. The appendix gives the questionnaire, an outline of the college achievement test, and the vocational guidance questionnaire sent to the colleges.—*J. M. Stalnaker* (Chicago).

5357. Turkstra, H. *Psychologisch-didactische problemen bij het onderwijs in de wiskunde aan de middelbare school.* (Psychological and didactic problems of teaching mathematics in high school.) Groningen: Wolters, 1934. Pp. 70. Fl. 1.25.—The discussion of the logical principles of mathematics has resulted in a discussion of the best teaching methods. The two solutions of this problem among mathematics teachers may be called logical and psychological. The author favors a logical method with psychological features. He strongly believes in a transfer of thinking ability, obtained in mathematics, to other subjects. An outline is given of the development of logical thinking in the child and of the influence of puberty on its adjustment to the gaps between grammar school and high school and between high school and college. The final chapter discusses the desirability of a psychological preparation for the mathematics teacher.—*H. Beaumont* (Kentucky).

5358. Tyler, R. W. *Characteristics of a satisfactory diagnosis.* *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 95-111.—All forms of educational diagnosis should be made only in relation to worth-while relevant objectives. Trivial diagnoses are pointless. Other characteristics or criteria of profitable diagnoses are validity, objectivity, reliability, the determination of the level to which a diagnosis can be satisfactorily taken with a consideration of the degree of specificity entailed, comparability of results obtained from different diagnostic procedures, exactness of results, comprehensiveness, appropriateness to current educational programs, practicability, and finally, well-qualified diagnosticians who know the objectives of the educational program of the school in question, possess a knowledge of children, have the ability to adopt a variety of techniques, and adopt a scientific attitude.—*P. S. de Q. Cabot* (Harvard).

5359. Watson, J. B. *Educação psicológica da primeira infancia.* (Psychological education in early childhood.) (Trans. by M. B. Lee.) Rio de Janeiro: Editora Marisa, 1934.—*R. R. Willoughby* (Clark).

5360. Williamson, E. G., Longstaff, H. P., & Edmonds, J. M. *Counseling arts college students.* *J. appl. Psychol.*, 1935, 19, 111-124.—A description of procedures and function, distribution of services and an analysis of activities during 1933-34 in counseling students at the University of Minnesota.—*R. S. Schultz* (Psychological Corporation).

5361. Woehlert, H. *Vergleichende Untersuchung schultüchtiger und schuluntüchtiger Volksschulkinder.* (A comparative study of good and poor students in grade school.) Berlin: Günther, 1934. Pp. 94. RM. 3.—This study includes 50 boys and 50 girls, selected from among 490 pupils of a school in Berlin-Spandau. Good and poor students from each grade were equally represented in the group. The statistical part of the investigation includes data concerning home environment, physical condition, grades in school, temperamental types, racial origin. Case-history studies were made of 20 children who were extremely good or extremely poor pupils, as well as of those who were below the average in age and children from very large families.—H. Woehlert (Berlin-Spandau).

5362. Zulliger, H. *Versager in der Erziehung.* (Failures in education.) *Z. psychoanal. Pädag.*, 1935, 9, 81-98.—Psychoanalysis is found useful in discovering the problem child's antisocial motives and their causes, and in helping him understand his own ego so that he may readjust himself. Frequently parents are unwittingly responsible for the child's problems, but a contributory cause is also seen in the fact that child training has become more difficult. This is due to a reduction in the average size of the family, making it less necessary for the child to make early adjustments. Training through reward or punishment, command and rules has replaced the natural "growing up" which consisted largely of imitation of slightly older siblings. The role of the father has decreased in importance except in cases of discipline, so that the child's attitude toward him has changed completely. The feeling of having a home, of being a part of and standing in a close relation to nature, are of great importance to the child, as is his cooperation with his parents in their work—all of which is frequently absent in the modern family. These deficiencies are partly balanced by improved techniques of dealing with problem cases and by better educational methods in general.—H. Beaumont (Kentucky).

[See also abstracts 5125, 5252, 5274, 5293, 5364.]

BIOMETRY AND STATISTICS

5363. Zubin, J. *Note on a transformation function for proportions and percentages.* *J. appl. Psychol.*, 1935, 19, 213-220.—A formula is derived for computing the standard error and critical ratios using the *T* method, which aims to reduce the influence of the sample of the proportion. This method is suggested for item analysis and a table is appended for transmuting proportions into *T* values.—R. S. Schultz (Psychological Corporation).

[See also abstract 5307.]

MENTAL TESTS

5364. Kuribayashi, U. *Intelligenzprüfung von Volksschulkindern, Mittelschülern und -schülerinnen in der Stadt Sendai.* (Intelligence tests of elementary school children, of middle school boys and girls in Sendai City.) *Tohoku psychol. Folia*, 1934, 1, 169-233.—Intelligence tests carried out on 18,659 boys and girls of elementary and middle schools in Sendai.—R. Kuroda (Keijo).

5365. Philip, B. R. *A comparison of an electric circuit tracing test with O'Connor Wiggly Block Test.* *J. appl. Psychol.*, 1935, 19, 148-165.—The electric circuit tracing test involving the operation of switches to light five electric lamps was used in setting up three problems of varying difficulty. This test and the O'Connor Wiggly Block were administered to 471 men and women students in arts, engineering and technical courses. No significant differences in performance were revealed between the groups. Women seem to do as well as men in both tests. Correlation of electric circuit tracing test scores and Wiggly Block scores with ratings in field work and laboratory courses for engineering students, ratings in practical work, woodwork, and electricity for technical students ranged from .03 to .38.—R. S. Schultz (Psychological Corporation).

5366. Pintner, R. *Intelligence tests.* *Psychol. Bull.*, 1935, 32, 453-472.—A summary is given for the year 1934. The volume of work in this field is about the same; there were no strikingly new developments in either theory or technique; and there was some shift of emphasis to personality tests. 163 titles are reviewed under the heads: meaning of intelligence; relation to other factors; growth; individual and group tests; school pupil; college student; the superior; the feeble-minded; delinquents; handicapped; race; sex; employment and guidance; inheritance; bilingualism.—J. F. Dashiell (North Carolina).

5367. Schwarz, J. *Rozklad ilorazow inteligencji mlodziemy w szkolach poznanskich.* (Distribution of IQ's in the Poznan schools.) *Psychometria*, 1934, 1, 5-16.—The Otis tests translated and restandardized in Poland were used. 1658 school children in primary and secondary schools were examined (ages 13-15) for the purpose of vocational advice and planned reorganization of classes with wide ranges of intelligence levels.—Z. Piotrowski (Columbia).

5368. Schwarz, J. *Szacowanie inteligencji.* (Estimation of intelligence.) *Psychometria*, 1934, 1, 17-30.—908 children of the same grade (approximate age 14 years) but of 24 different schools were ranked by their teachers, and the correlation between the teachers' estimates and the Binet tests was .43 on the average. Among 592 children referred by teachers to the psychological bureau because of suspected feeble-mindedness, 51% were feeble-minded, 46% were borderline, and only 3% were above the borderline level (Binet tests). 19 women students in a teachers' college estimated the intelligence of their classmates on a five-point scale; the correlation with test results was $.62 \pm .16$. The correlation for another class of 33 men was $.67 \pm .07$; for a mixed class of 35, the correlation was $.56 \pm .01$. Self-estimates were very poor; 42% overestimated and 38% underrated their intelligence. 123 teachers estimated the intelligence of 12 boys and girls with IQ's ranging from 18 to 160; the Spearman rank correlation coefficient was $.66 \pm .04$. A German summary.—Z. Piotrowski (Columbia).

5369. Tanaka, K. *Ippan chinō no hattatsu ni kansuru ichi kenkyū.* (A study on the development of general intelligence.) *Kyōiku Shinri Kenkyū*,

1935, 10, 1-10.—According to the author's measurement of general intelligence by non-language tests (B-type tests) it was found that the growth of general intelligence can be authenticated successively up to the seventeenth year of age, though it is very slight after the fifteenth. The curves of growth never ascend in a straight line, but there is a steep as well as a slow ascent; speaking in terms of age, it is steep up to the eleventh year and slow afterwards. The data consist of materials obtained from 252 children of the primary and 560 boys of the secondary school, each attached to the Tokyo Higher Normal School.—R. Kuroda (Keijo).

5370. Travis, L. E. Intellectual factors (in learning). *Yearb. nat. Soc. Stud. Educ.*, 1935, 34, 37-47.—Intellect is characterized by altitude, width and area. Different kinds of intelligence are recognized: abstract, social and concrete. "Human traits are rarely perfectly correlated either positively or negatively." A positive relationship exists between intellect and mechanical ability. Since intellectual deficiency is complex, it may be expressed as a retardation of mental and physical development, low intelligence, social inefficiency with economic and industrial dependence, emotional deficiency and a lack of adequate motor coordination. Degrees of intellectual deficiency may be expressed by limiting values of intelligence quotients, with all IQ's below 50 suggestive of institutional treatment. Although intelligence may not be increased, its functional potentialities may be widened. Special disabilities may be classified under such headings as perceptual disabilities, defects of visual and auditory memory span, alexia, aphasia, agraphia and amusia. Other interferences in intellectual development concern symbolic formulations, perseveration and attention. The last named particularly is a necessary prerequisite of all learning and is dependent upon such subjective factors as interest, motivation, attitude and effort, and upon such objective ones as the presence of appropriate stimuli and the absence of distracting influences.—P. S. de Q. Cabot (Harvard).

5371. Williams, J. H. Validity and reliability of the Goodenough intelligence test. *Sch. & Soc.*, 1935, 41, 653-656.—100 children, ages 3 to 15 years, were given the Stanford-Binet test and the Goodenough test of intelligence, which involves the drawing of a man. Five untrained students scored the drawings. It is concluded that relatively inexperienced persons seem capable of scoring the Goodenough test reliably, since the extent of agreement of five untrained raters approximated the self-agreement of the one rater scoring the tests at different times. A brief period of supervised scoring for raters is, however, recommended. Raters agree somewhat more closely in their evaluations of drawings made by girls than of those made by boys. Certain items in the test are more difficult to score than others. Since the Goodenough test score (median of 5 ratings) correlated .49 with CA and .80 with Stanford-Binet test MA and since, furthermore, the IQ's obtained with the Stanford and drawing tests correlated .65, the latter instrument is judged to be comparable in validity to other mental ability tests for young children.—H. L. Koch (Chicago).

5372. Wintch, J. Le dessin comme témoin du développement mental. (Drawing as an index of mental development.) *Z. Kinderpsychiat.*, 1935, 2, 33-44.—The first installment of an article on the use of the drawing of a man as a test of intelligence. The norms worked up by Schuyten are used, and numerous examples of production at different age levels and at different levels of mental development are presented.—D. Shakow (Worcester State Hospital).

[See also abstract 5403.]

CHILDHOOD AND ADOLESCENCE

5373. Aichhorn, A. Erziehungs-Beratungs-Seminar. (Child guidance seminar.) *Z. psychoanal. Pädag.*, 1933, 7, 153-159.—The principal aims of the child guidance seminar, established on May 8th, 1933 by the educational committee of the Vienna Psychoanalytic Society, are to clarify the attitude of counselors towards their work, and to serve as a clearing house for contributions from the fields of education and analysis. It is thought that without psychoanalytic background counselors will often be unable to understand and adjust cases coming to their attention. Several examples of such cases are given.—H. Beaumont (Kentucky).

5374. Bálint, A. Die Bedeutung des Märchens für das Seelenleben des Kindes. (The significance of the fairy tale for the mental life of the child.) *Z. psychoanal. Pädag.*, 1935, 9, 113-116.—The fairy tale is the only untruth which parents tell their children without expecting them to believe it implicitly. At the same time, it is the child's first approach to real life, because in the fairy tale exist good and bad people and all manner of injustices from which the child is shielded in his contacts with real life. In this way he learns that there are dangers and difficulties in life and that they can be overcome by struggle, ability and adaptation, which is better than to believe that all difficulties may be avoided simply by obeying the parents' wishes. Also, the fairy story teaches the child that his own wishes and drives are shared by others and suggests new outlets for many of them.—H. Beaumont (Kentucky).

5375. Bálint, M. Der Onanie-Abgewöhnungskampf in der Pubertät. (The struggle against masturbation during puberty.) *Z. psychoanal. Pädag.*, 1934, 8, 374-391.—Masturbation fantasies during puberty invariably retain, in modified form, the infantile love objects, father or mother. This explains the child's intense feelings of guilt and society's condemnation of this activity (because of its incestuous nature). Attraction by members of the opposite sex and castration fears tend to aid the child in his struggle against masturbation. Since the practice is all but universal, except among neurotics, it should not be punished when discovered; but if other symptoms occur or the practice is continued to excess beyond the period of puberty, treatment is recommended. It is emphasized that even excessive masturbation is not a disease but an indication of inadequate sex adjustment. To discover the cause of this abnormality is the principal task of analysis.—H. Beaumont (Kentucky).

5376. Baumgarten, F., & Steiger, J. *Eine neue Methode zur Feststellung der Interessen von Kindern und Jugendlichen.* (A new method to determine the interests of children and adolescents.) *Schweiz. Lehrer-Ztg.*, 1935, No. 23.—This is a catalogue test, containing titles of 438 juvenile books, listed in random order. The titles are symptomatic, because they either remind the subjects of a complex or have some connection with his present dominating interest. Subjects are requested to select five titles of books which they would like to read or possess. This indirect method of questioning is considered advantageous because it overcomes the child's dislike of exposing his basic interest and at the same time allows one to measure the extent of his interests. Among the 2000 responses obtained no two are alike, but factors of age, sex and intelligence are clearly manifest. Personality structures may be distinguished on the basis of the number of fields from which the five titles have been selected. From 9 to 14 the number of fields represented decreases, but it increases again after puberty (average numbers were 3.4 for boys, 3.6 for girls). Slightly over 40% of the boys chose adventure stories, 52.8% of the girls family stories and biographies. It is pointed out that wish (longing for an object not now available) and interest (longing to fill a psychic need) are very seldom directed to the same object.—H. Beaumont (Kentucky).

5377. Blendiger, W. *Menschliche Spätstufe als ein völkischer Wert.* (Late maturing in man as a racial value.) *Rasse*, 1935, 2, 100.—Biological analogies attest the value of late physical and mental maturing, particularly in the Nordic race.—P. Krieger (Leipzig).

5378. Bonaventura, E. *Note sulla psicologia dell'adolescente.* (Considerations on the psychology of youth.) *Vita scol.*, 1935, 6, 3.—The author views the latest studies on this subject, which, according to him, have been rather descriptive than explanatory. After delimiting the period of youth from the psychological point of view, he considers synthetically the predominant feature of this period, which, he states, is the "ambivalence rule." He shows some of the most striking of these contradictions in the intellectual and affective life, and considers the results of this incoherence also in the practical and social life of young individuals. He mentions other researches on the aptitude of adolescents for introspection, and ends his work with practical and pedagogical considerations, including also sexual education.—G. M. Hirsch (Rome).

5379. Bornstein, S. *Unbewusstes der Eltern in der Erziehung der Kinder.* (The parents' unconscious in child training.) *Z. psychoanal. Pädag.*, 1934, 8, 353-362.—When children remind their parents of their own childhood, unconscious concepts are stirred up which date back to forgotten infantile experiences. Though seldom becoming conscious, the concepts express themselves uncontrollably in the parents' reactions. They either treat their children as they were treated by their own parents, or they express the protests which they felt in their own childhood, permitting their children things which

they themselves were not permitted. Many mothers show in their attitude towards their daughters an unconscious revival of their own infantile disappointment with their sex. Parents who as children experienced the wish that younger siblings might be carried off again by the stork that brought them often express this wish towards their own children in pathological anxiety for their welfare and safety. Fortunately, however, protests against parental treatment may also result in a better understanding of the problems of one's own children.—H. Beaumont (Kentucky).

5380. Busemann, A. *Jugend im Selbstbildnis.* (Youth's self-portraiture.) *Z. Kinderforsch.*, 1935, 44, 63.—Busemann discusses the genetic aspect of the progressive development of self-delineation by young people. In studies of heredity for purposes of racial psychology the adolescent "immaturity of type" is a source of error, since at this stage of development diametrically opposed phases often follow one another. In adults, divergencies of the same degree would serve as a basis for a separation of types. The article contains 24 illustrations.—P. Krieger (Leipzig).

5381. Christoffel, H. *Zur Biologie der Enuresis.* (On the biology of enuresis.) *Z. f. Kinderpsychiat.*, 1934, 1, 49-58.—Another installment of the discussion of enuresis which considers micturition in its relation to sleep.—D. Shakow (Worcester State Hospital).

5382. Christoffel, H. *Zur Biologie der Enuresis.* (On the biology of enuresis.) *Z. f. Kinderpsychiat.*, 1934, 1, 76-86.—A continuation of the series of articles on the subject. Urophilia, observations on animals and observations from folklore are taken up. The discussion of the psychology of enuresis is begun for completion in the next installment.—D. Shakow (Worcester State Hospital).

5383. Coetzee, J. C. *Die taalontwikkeling van die kleinkind.* (Language development of the small child.) *Ned. Tijdschr. Psychol.*, 1933, 1, 214-228.—(Not seen.)—H. Beaumont (Kentucky).

5384. Cornioley, H. *Die sprachliche Entwicklung eines Kindes von ihren Anfängen bis zum dritten Lebensjahr.* (The linguistic development of a child from its first appearance to the third year of life.) Bern: Herbert Lang, 1935. Pp. 48. Fr. 1.20.—The writer reports observations made upon his own child (a girl). He finds evidence for parallels in individual and racial linguistic development. The reports from the third year are limited to typical and important items. In his conclusion, the writer utilizes the "law of least exertion" as a principle which gives meaningful organization during the period of learning to the stock of words acquired by the child.—H. Cornioley (Bern).

5385. Dannemann, A., Gnerlich, G., Henze, A., Meltzer, E., Schober, H., & Stern, E. *Enzyklopädisches Handbuch der Heilpädagogik.* (Encyclopedic handbook of corrective education.) 2nd ed., 2 vol. Halle: Marhold, 1934. Pp. 1712. RM. 81.30; 88.—To this work 160 specialists contributed 1700 articles and 2000 explanations of technical terms in

the fields of psychology, psychiatry, psychoanalysis, medicine, education, manual training, and others.—*H. Beaumont* (Kentucky).

5386. Davenport, C. B. Individual vs. mass studies in child growth. *Proc. Amer. phil. Soc.*, 1931, 70, 381-389.—The growth of each individual child should be determined at frequent intervals, and during spurts of growth some allowance should be made for deviations from the ordinary types of activity. The data collected from studies on large numbers of children are valueless in individual cases.—*R. Goldman* (Clark).

5387. Dicks, G. H., & Childers, A. T. The social transformation of a boy who had lived his first fourteen years as a girl: a case history. *Amer. J. Orthopsychiat.*, 1934, 4, 508-517.—Detailed account of the readjustment procedure in the case of a well-developed boy of 14, who was masculine in every respect (though slightly underdeveloped), with an IQ of 95, who had been forced by his parents to assume the role of a girl during the first 14 years of his life.—*H. Beaumont* (Kentucky).

5388. Fischer, H. Sehnsucht und Selbstbefriedigung. (Yearning and auto-eroticism.) *Z. psychoanal. Pädag.*, 1933, 7, 140-144.—A 3½-year-old girl indulged in auto-erotic practices excessively and frequently in the presence of other children and adults. It was found that her separation from a nurse who had fondled her considerably had marked the onset of masturbation. She was taught to exercise self-control, at least publicly, and shortly afterward became greatly attached to a slightly older boy. In this relation she took the leading part and through it she developed a greater measure of independence and sociability.—*H. Beaumont* (Kentucky).

5389. Glanzmann, E. Zur Psychopathologie der Enkopresie. (On the psychopathology of encopresis.) *Z. f. Kinderpsychiat.*, 1934, 1, 69-76.—A discussion of the subject of encopresis in its relation to enuresis, anal sexuality, anxiety neurosis, and sexual anxiety. A few case histories are given.—*D. Shakow* (Worcester State Hospital).

5390. Growdon, C. H. A preliminary study of the effectiveness of a state-wide behavior clinic. *Quart. Bull. Mgng Off. Ass. Ohio Dep. publ. Welf.*, 1935, 12, No. 1, 6-12.—In 1932 a follow-up survey was made of the total cottage cases (N = 497) studied at the Ohio Bureau of Juvenile Research during the year 1929. Information was obtained regarding the disposition and subsequent adjustment of 416 cases. The Bureau's recommendations were followed in 51.6% of the cases, partially followed in 24.6% of the cases, and not followed in 23.8% of the cases. Where the recommendations were followed the adjustment of the problem was reported as: solved 58.6%, definitely improved 11.9%, no improvement 21.2%, definitely worse 5.7%, variable 2.6%. Where the recommendations were only partially followed the problem was reported as: solved 22.1%, definitely improved 21.0%, no improvement 44.3%, definitely worse 7.3% and variable 5.3%. Where the recommendations were not followed the problem was reported as: solved 11.7%, definitely improved 9.5%, no improvement 46.8%, definitely worse 30.9%, and

variable 1.1%. "If we consider the two more successful groups as *successful* and the two least successful groups as *failures*, we can roughly say that the ratio of success to failure is: If recommendations are followed, 7 to 3; if partially followed, 4 to 5; and if not followed, 2 to 8." A comparison of certain aspects of this study with the Gluecks' findings reveals a number of important differences between the Bureau of Juvenile Research and the Judge Baker Foundation Clinic. While about 80% of the Foundation cases were contacted only once for a few hours' study, all the Bureau cases were studied continuously, under varied conditions, over a period of four to eight weeks, during which time they were in residence at the Bureau. Whereas not more than 20% of the Foundation Clinic recommendations were carried out, over 50% of the Bureau recommendations were followed in detail. The Bureau attributes much of the success of its work to the perfection of a comprehensible and convincing type of report in which detailed and specific recommendations are made to the committing agencies.—*R. M. Stogdill* (Columbus).

5391. Heller, T. Ueber einen bemerkenswerten Fall von Erethismus im Kindesalter. (On a noteworthy instance of erethism in childhood.) *Z. Kinderpsychiat.*, 1935, 2, 45-47.—*D. Shakow* (Worcester State Hospital).

5392. Junge, K. R. Beiträge zur Entwicklung der Auffassungsfähigkeit für komplexe Sachverhalte bei Kindern des 10.-14. Lebensjahres. (Contributions to the development of perceptive capacity for complex relationships in children 10-14 years old.) Tübingen: Tüb. Studentenwerk, 1934. Pp. 50. RM. 2.50.—Two films were shown under identical conditions to 522 pupils, who then wrote descriptions of them. Two typical reports for each year of age under investigation were analyzed as to the developmental stage of perception of complex relationships. In the concluding chapter Junge gives the findings for the various ages and the two sexes and stresses the gradual development of apperception in the child.—*K. R. Junge* (Tübingen).

5393. Kanner, L. Child psychiatry. Springfield, Ill.: Thomas, 1935. Pp. xviii + 527. \$6.00.—"The first textbook of child psychiatry in the English language," with prefaces by Adolf Meyer and Edward A. Park. It is "an attempt to cover the entire field of children's personality disorders on a broad, objective, unbiased, and practical basis. . . . It is intended primarily for physicians and medical students, but is also meant to be of help to all those interested in children's behavior problems: social workers, psychologists, sociologists, educators, juvenile court workers, etc." The volume is divided into the following sections: basic principles, examination and diagnosis, principles and aims of psychiatric treatment, personality difficulties forming essential features or sequels of physical illness, personality difficulties expressing themselves in the form of involuntary part-dysfunctions, personality difficulties expressing themselves clearly as whole-dysfunctions of the individual. The general approach is a psychological one. Index and running bibliography.—*D. Shakow* (Worcester State Hospital).

5394. Milio, G. *Psicopatie sessuali nell'infanzia.* (Sexual psychopathies in childhood.) *Arch. ital. Pediat. Puericol.*, 1934, 2, 690-723.—General considerations on the development of sexuality in children. Importance of the endocrine glands and of the nervous system. Sexual syndromes are independent of any damage to the genital glands. Traits of sexual activity in the first and second stages of childhood are described, with quotations from Freud's theory. The importance of the erogenous zones, the pubertal period, and pubertal psychoneurosis are discussed.—G. M. Hirsch (Rome).
5395. Muchow, M. *Der Lebensraum des Grossstadtkindes.* (The living-space of the child in the large city.) Hamburg: Martin Riegel, 1935. Pp. 95. RM. 2.20.—The writer attempts to study the "living-space" of the child in the large city and thus to furnish a contribution to the understanding of the "world of the child." New methods of research are described. Tables and sketches are included.—H. Muchow (Hamburg).
5396. Reiner-Obern timer, G. *Erste Beobachtungsergebnisse eines Falles aus der Erziehungsberatung.* (Preliminary report of a child guidance case.) *Z. psychoanal. Pädag.*, 1933, 7, 159-164.—A 16-year-old boy was found guilty of petty thievery and homosexual practices. Social workers had been unable to explain these activities satisfactorily, but had established the fact that neither his heredity nor his immediate home environment was particularly unfavorable. He was therefore considered a victim of economic distress and temptation. However, a psychoanalytic study resulted in the discovery that a deeply-rooted fear complex was responsible for his asocial behavior. This enabled the social agency to take the necessary steps to remedy the situation.—H. Beaumont (Kentucky).
5397. Robb, E. *The energy requirement of normal three- and four-year-old children under standard basal metabolism conditions and during periods of quiet play.* *Child Developm. Monogr.*, 1934, No. 16. Pp. 71. \$1.50.—R. R. Willoughby (Clark).
5398. Rood, D. *The nurse and parent education.* *Child Developm. Monogr.*, 1935, No. 19. Pp. xiii + 87.—This study investigates the degree to which a knowledge of child development and child guidance is an inherent need in the practice of nurses, the extent to which nurses are ordinarily equipped with such knowledge, and the specific questions and problems in parent education that nurses are most likely to meet. Questionnaire returns were obtained from 201 nurses from all parts of the country; parents who had recently employed nurses were interviewed; nurses filled out a check list to indicate the areas of knowledge that were most useful in practice and the degree to which they had been prepared in these areas before going into the field; specialists in the field of nursing and child development indicated, by means of ratings, the items of information that they regarded as most important for a nurse to know. The findings indicate that problems relating to child development, the behavior of children, and child guidance often arise in the practice of nurses, and the study considers problems that must be faced in this regard in planning the curriculum for nurses in training.—A. T. Jersild (Columbia).
5399. Rose, M. S., & Borgeson, G. M. *Child nutrition on a low-priced diet.* *Child Developm. Monogr.*, 1935, No. 17. Pp. xiv + 109.—R. R. Willoughby (Clark).
5400. Ruppert, H. *Aufbau der Welt des Jugendlichen.* (The structure of the world of youth.) Leipzig: Barth, 1935. Pp. 197.—R. R. Willoughby (Clark).
5401. Schächter, M. *Étude psycho-pathologique et criminologique à propos de l'enfance maltraitée.* (A psychopathological and criminological study in relation to the problem of mistreated children.) *Z. Kinderpsychiat.*, 1935, 2, 48-59.—A discussion of the general question of cruelty to children together with a special consideration of the question of lying and evidence of children. The importance of psychopathological and criminological study is emphasized.—D. Shakow (Worcester State Hospital).
5402. Schmideberg, M. *Zur psychoanalytischen Behandlung asozialer Kinder und Jugendlicher.* (Psychoanalytic treatment of asocial children and adolescents.) *Z. psychoanal. Pädag.*, 1934, 8, 363-373.—Psychic causes of asocial behavior may be inability to express aggressiveness normally (so that an asocial outlet has to be found), or a reinforcement of primitive instincts by fear. An extreme example of unconscious factors determining asocial behavior is supplied by psychoneurotics (moral insanity). Analysis may eliminate these conflicts and find more acceptable ways of expressing aggressiveness. Thus analysis prepares the "difficult" child for the educational process and salvages his personality, greatly to his benefit and to that of society.—H. Beaumont (Kentucky).
5403. Schorn, M. *Untersuchungen über die Monotonie-reaktion bei Kindern.* (Studies relative to the monotony reaction of children.) *Arch. ges. Psychol.*, 1935, 93, 335-346.—The statement is made that the Münsterberg explanation of fatigue is oversimplified and needs study and restatement. The author undertakes an experiment with children to study their reaction to monotony, taking 12-year-old boys and girls in school attendance, thus making possible a study of characteristics through observation and from teachers' reports. What type of children react to monotony most readily? The experiment included a two-hour session in addition and a two-hour period of bead-stringing. Comparison was made of the last fifteen-minute accomplishment with that of a control period of only fifteen minutes at another time, accomplishment being measured by errors made. Impatience at work was studied and recorded.—A. B. Herrig (Michigan Central State Teachers College).
5404. Schwarz, J. *Plec a inteligencja.* (Sex and intelligence.) *Psychometrika*, 1934, 1, 131-159.—A summary of experimental investigations of Terman and European workers is followed by the author's research. He examined 1702 public-school children and 138 high-school children. The average IQ's for

the sexes were approximately equal, with a slight superiority of the girls before the age of 10. The boys had relatively more extreme cases. Girls had a more receptive, boys a more spontaneous intelligence. Boys were better in technical and mathematical problems, girls in languages. Estimations of their own intelligence were very bad. Teachers estimated the intelligence of children from photographs fairly well, but tended to overestimate for their own sex; girls were more difficult to judge than boys. Vocational choices were significantly influenced by the child's degree of intelligence. Sex was not correlated with inheritance of intelligence; any child could be expected to inherit intelligence from either parent, if parents were of unequal intelligence levels. The tests used were a translation of the Stanford-Binet adapted to Polish conditions.—Z. Piotrowski (Columbia).

5405. Simpson, M. Parent preferences of young children. *Teach. Coll. Contrib. Educ.*, 1935, No. 652. Pp. viii + 85.—50 boys and 50 girls of each of five age groups (5 to 9 years) were (1) asked a group of questions, (2) shown a set of 9 pictures, (3) told 2 stories, (4) asked about their dreams, in a controlled interview designed to determine their parent preference. They were given a group intelligence test. All 500 (white) children lived at home with their parents. The group was homogeneous in its socioeconomic status. The examiner was a woman. Both sexes and all but one age group show more mother- than father-preference. The 5-year-old girls show a father-preference (60%). Both sexes express an increase in mother-preference and a decrease in father-preference as they pass from 5 to 10 years of age. The correlations between corporal punishment and preference are negative. There is no definite relation between the rank order in the family and preference, but the eldest child likes the father best, and the youngest the mother. The least intelligent boys (IQ 90 and less) prefer the father, the most intelligent girls (IQ 110 and over) prefer the mother. In all cases the mother appears more frequently in the dreams. The bibliography lists 42 titles.—J. M. Stalnaker (Chicago).

5406. Sonohara, T. On the shyness of young children: an analytical study of the mental attitude in a test situation. *Jap. J. exp. Psychol.*, 1935, 2, 89-108.—The author concludes from his analytical study of mental attitudes of young children in a test situation that shyness has two sources: the first is the negative effect of a certain situation upon individuals, which may be traced back to the timidity in infancy; the other is the objection to being tested, or more generally to being compelled to betray one's own inability or weakness, which originates from a conflict between anxiety about one's own ability and counteracting aspiration.—R. Kuroda (Keijo).

5407. Stagner, R., & Drought, N. Measuring children's attitudes toward their parents. *J. educ. Psychol.*, 1935, 26, 169-176.—A report of a scale, developed by the Thurstone technique, for the measurement of the affection-aversion attitudes of children toward their parents. 50 judges, equally divided as to sex, rated 120 statements on an 11-point scale.

Separate ratings were made for reference to father and to mother. Final scales of 40 statements about father and 32 statements about mother were given to "slightly over 100 college students of each sex." Biographical data and self-ratings on attitudes toward the parents were obtained from some students. The uncorrected split-half reliability coefficients were .76 and .72 for the father and mother scales respectively. The correlations between scores on the test, self-ratings on attitudes toward parents, and diagnostic biographical data argue for the validity of the test. Since no reliable differences between the attitudes of men and women toward their fathers and mothers were obtained, and since the fact of a positive correlation (.168) between the scores of individuals on the two attitude scales was obtained, it is suggested (1) that the Freudian theory of the Oedipus complex is incorrect, and (2) that the personality of the child is a common factor in determining the attitudes toward father and mother. The scales used are not given.—A. W. Melton (Yale).

5408. Sterba, E. Verbot und Forderung. (Forbidden and inviting.) *Z. psychoanal. Pädag.*, 1934, 8, 398-402.—A 20-months-old girl made a practice of inviting her mother to do the things which she had just forbidden. She was between two stages of development, one in which nothing within reason was denied, the other in which she began to discover that certain types of behavior are prohibited. Her invitation to her mother was an attempt at prolonging the previous stage. Shortly afterward she definitely accepted the new rules of the game.—H. Beaumont (Kentucky).

5409. Sterba, E. Ein Fall von Eszstörung. (A case of eating disturbance.) *Z. psychoanal. Pädag.*, 1935, 9, 99-105.—Usually the eating disturbances of young children are a pathological infantile protest against denial of the breast or withdrawal of the nipple as a libidinous object. The frequent occurrence of such disturbances at the time when the child is taught to control its bowel and bladder movements suggests a connection between the oral and anal zones. An example is cited in which eating difficulties (carried to the extreme of inability to swallow and vomiting) suddenly disappeared when the child was again allowed to soil herself at will, while afterwards habits of cleanliness were definitely established by an appeal to her pride and ambition.—H. Beaumont (Kentucky).

5410. Sterba, R. Eine Kinderbeobachtung. (A child observation.) *Z. psychoanal. Pädag.*, 1934, 8, 397-398.—A four-year-old girl remarked on seeing her two-year-old brother in his bath: "Why don't you let his hair grow so he would be a little girl?" Thus she expressed her castration impulse in a seemingly harmless way by substituting "hair" for "sex organ" and "let grow" for "cut off."—H. Beaumont (Kentucky).

5411. Taylor, J. H. Innate emotional responses in infants. *Ohio Univ. Stud.*, 1934, No. 12, 69-81.—"Rage" stimuli (arm restraint, nose restraint) and "fear" stimuli (drop, loud noise) were administered to 40 infants ranging in age from one to 12 days. The conditions were similar to those described by Watson. No constant pattern responses in the infants used in

this study were evoked by the different stimuli. "As researches in infant behavior become more numerous it becomes increasingly evident that, with the possible exception of a few structural reflexes, the infant's behavior is best characterized as generalized activity."—*R. Goldman* (Clark).

5412. **Thrum, M. E.** The development of concepts of magnitude. *Child Developm.*, 1935, 6, 120-140.—Individual experiments with 34 children between the ages of two and four and one-half years, in which each child was asked to indicate the "biggest," the "littlest," or the "middle-sized" object in a series of three cardboard forms, provided evidence "that at the age of three years some children have well-developed concepts of magnitude." "Correct choices of the smallest object were not so frequent as for the biggest," though both of these perceptions were more accurate than that of middle-sized relations. Accuracy of selection was not materially influenced by the order of presentation or by the form of the objects presented. Large differences in size were more accurately perceived than were small differences.—*F. D. McTeer* (Wayne University).

5413. **Tramer, M.** Tagebuch über ein geisteskrankes Kind. (Diary on a psychotic child.) *Z. f. Kinderpsychiat.*, 1934, 1, 91-97.—The first installment of a diary, kept by the mother, of a child who later became psychotic. The entire diary covers the period from birth to 4 years 9 months. The first three months are covered in this first article, accompanied by comments on the part of the author, who examined the patient when the latter was 12 years old.—*D. Shakow* (Worcester State Hospital).

5414. **Tumlirz, O.** Wiederholungen in der seelischen Entwicklung. (Recapitulation in mental development.) *Ned. Tijdschr. Psychol.*, 1933, 1, 54-65.—(Not seen.)—*H. Beaumont* (Kentucky).

5415. **Uhrbrock, R. S.** The vocabulary of a five-year-old. *Educ. Res. Bull.*, 1935, 14, 85-97.—During the six weeks preceding her fifth birthday, a girl dictated one cylinder a day on an Ediphone, recording approximately 24,000 words on 37 wax cylinders. A list of 1,885 different common words used is given.—*R. H. Brown* (Clark).

5416. **Valentine, W. L., & Wagner, I.** Relative arm motility in the newborn infant. *Ohio Univ. Stud.*, 1934, No. 12, 53-68.—Part I deals with the results obtained in 5- to 20-minute observations of 100 infants in an apparatus which recorded the tridimensional movements of both the right and left arms. The average performance of the 100 infants showed that the motility of the right arm typically exceeds that of the left arm throughout the first ten days after birth. In the right arm the vertical component of movement predominates; in the left arm the lateral predominates. Right-arm dominance is equal for boys and girls. Part II is a follow-up study of the same infants one year later. Only 31 of the original 100 cases could be observed. Hand preference was observed by noting which hand was used for grasping, pounding, etc. Relative arm motility at birth was not found to be the index which was responsible for or associated with later hand preference. The authors believe that, for their

group, hand preference was much less definitely developed during the first year than has commonly been supposed.—*R. Goldman* (Clark).

5417. **Van der Horst, L.** Geestelijke ontwikkeling en uitdrukkingsvermogen. (Mental development and expressive ability.) *Ned. Tijdschr. Psychol.*, 1933, 1, 489-496.—(Not seen.)—*H. Beaumont* (Kentucky).

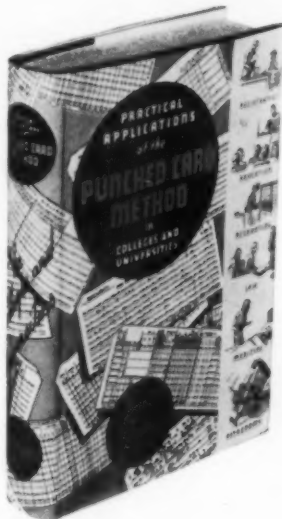
5418. **Wais, M. H.** Sympathieformen im frühen Kindesalter. (Forms of sympathy in early childhood.) Berlin: (Phil. Diss.), 1935. Pp. 95.—*R. R. Willoughby* (Clark).

5419. **Weigl, E.** Behandlung von psychischen Störungen bei Kindern und Jugendlichen. (Treatment of psychic disturbances of children and adolescents.) *Ned. Tijdschr. Psychol.*, 1935, 3, 179-206.—The Child Guidance Institute in Bucharest handled in its 1½ years of existence 453 cases and made 458 home and school visits. Almost half of the children came from families living in a single room (2 to 10 people); only one-half of them had a bed to themselves. In 97 cases there was evidence of mild neurosis in the family, in 7 definite psychosis, in 53 tuberculosis or venereal disease. Systematic corporal abuse as a method of home training occurred in 29% of the cases. 18% had lost either parent or both, 3% had a foster parent, and in 3% of the cases the parents were divorced. 40% were only children. Ages ranged from infancy to 20. Most frequent reasons for consultation were: disciplinary (18%), eating difficulties (17%), inability to learn (12%). The results were as follows: completely cured 17%, improved 15%, treatment continued 30%, no improvement 14%, discontinued 24%. Several illustrative cases are cited.—*H. Beaumont* (Kentucky).

5420. **Zulliger, H.** Schwierige Schüler. (Problem pupils.) *Z. psychoanal. Pädag.*, 1935, 9, 138-147.—A change of environment is often sufficient to readjust a neglected problem child, provided the foster parents are carefully selected and remain in constant touch with the child-guidance counselor, and the child is willing to develop an emotional attachment to them. In this manner, they will influence the development of the child's super-ego, thus modifying his behavior definitely. Frequently children who have been accustomed to abnormally strict and severe discipline, whose will and independence have been "broken," give the impression of being well-behaved and docile until they come under the authority of a less exacting adult (e.g. teacher or foster father), when they become unmanageable. This happens because the child has learned to depend on strict discipline, feels insecure without it, and now attempts to force the adult to be as strict as his father. If he succeeds (and there is a good chance of his doing so), he will develop into a meek "follower." If the adult persists in his original attitude, a slow process of reeducation, based on authority founded on affection rather than coercion, is necessary—and this is not always a success.—*H. Beaumont* (Kentucky).

[See also abstracts 4958, 5097, 5107, 5121, 5137, 5147, 5175, 5180, 5183, 5188, 5192, 5193, 5195, 5197, 5201, 5202, 5204, 5236, 5239, 5258, 5284, 5304, 5311, 5316, 5317, 5354, 5359.]

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